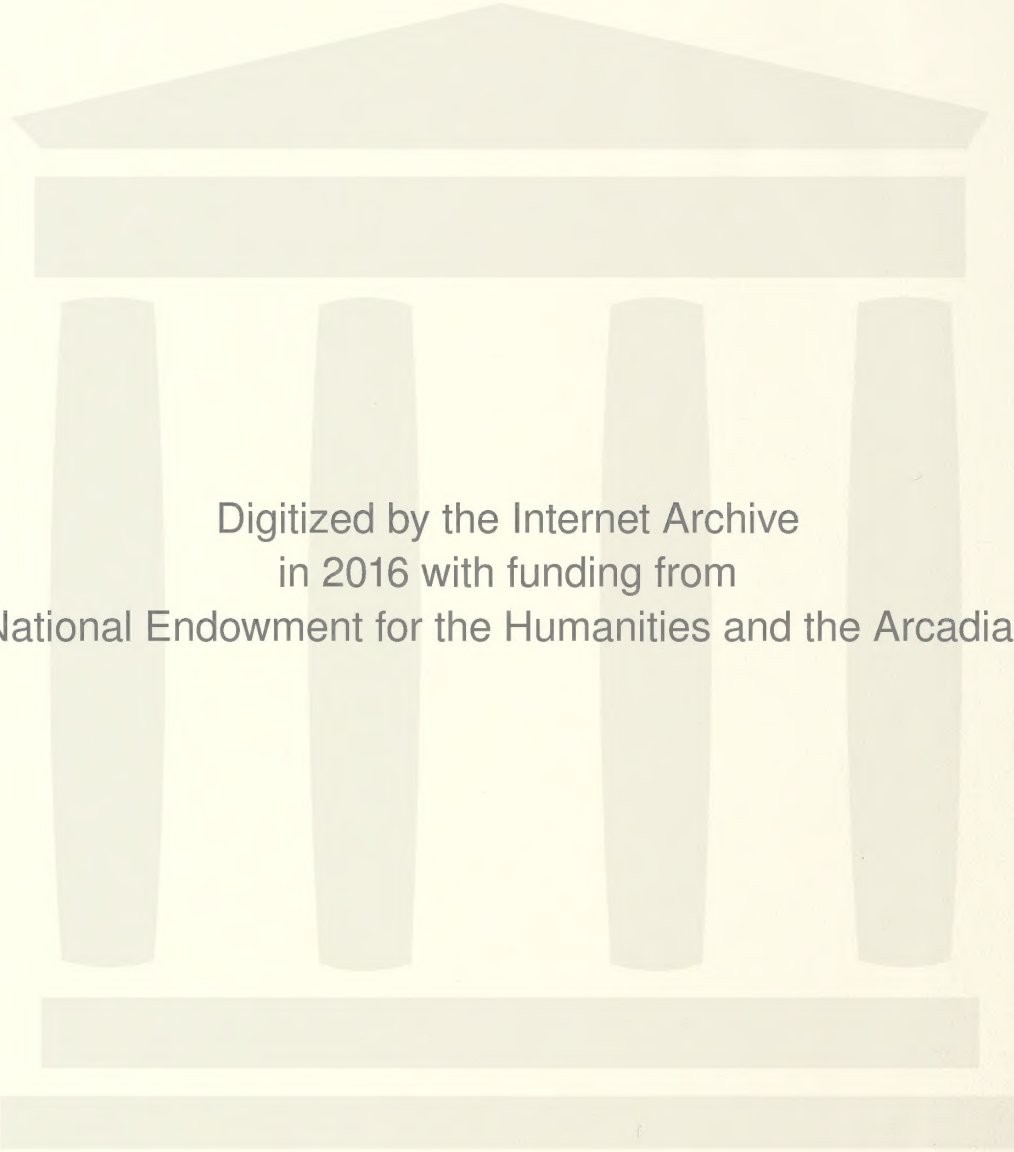


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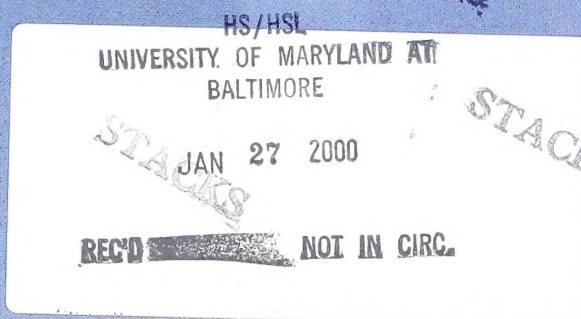
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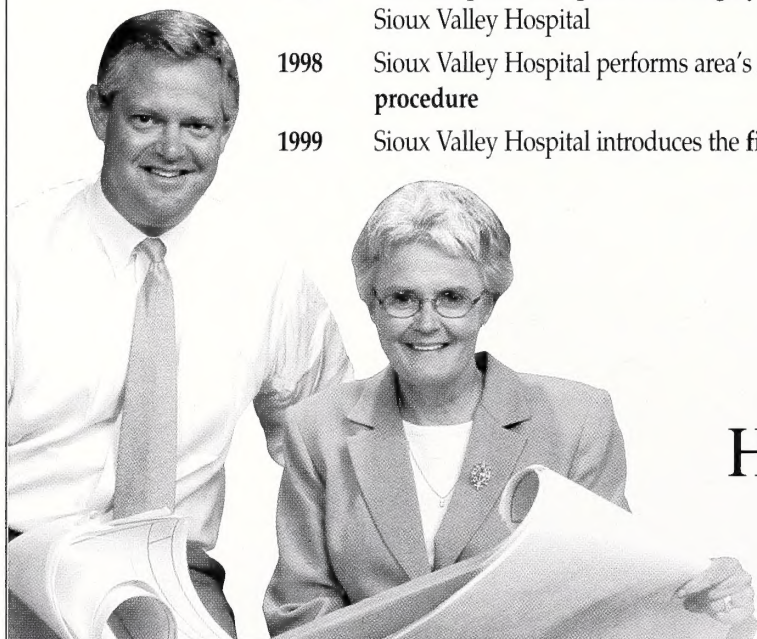
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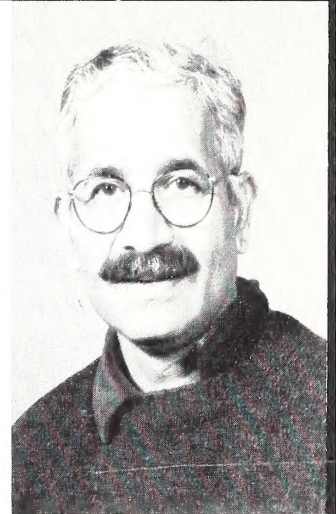
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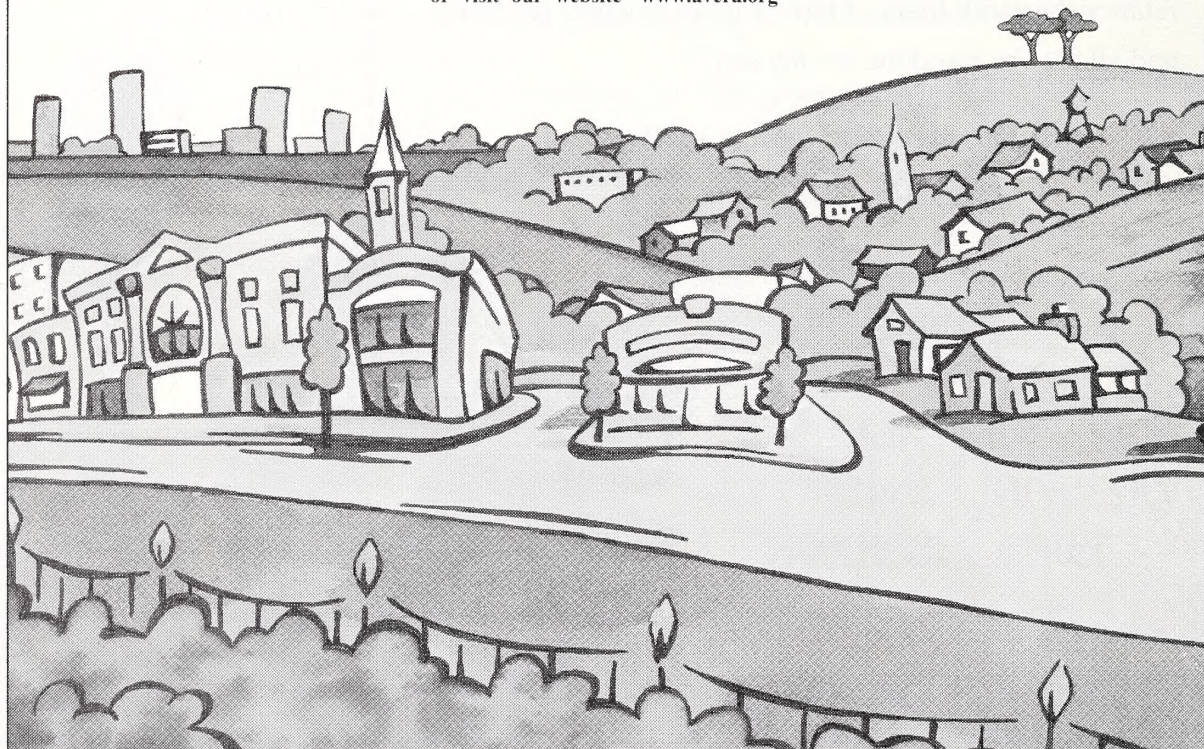
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A wintry landscape in South Dakota; taken by Greg Latza,
Sioux Falls, SD, owner of PeopleScapes.

President's Page



**K. Gene Koob, MD, President
South Dakota State Medical Association**

Here it is, semi hot news from the meetings-AMA-SDSMA-NCMC-District 3 and etc.! The latter was mostly fun but also gives your president a chance to spend an informal evening with the membership. Idea exchanges, rumors squelched (and some started), business reports and updates on your association's activities, are all part of the Presidents' District Meetings. Please check and see when Paul and I are scheduled to meet with your district. We would love to be able to see you again and to exchange ideas. Thanks to the members of districts 3 & 12 for their excellent hospitality.

The November Council meeting was mainly a housekeeping session. The biggest item probably was the hot topic of economic credentialing, especially Rapid City's entry into the fray. The council voted overwhelmingly to oppose the arbitrary closing of the cardiac surgery staff by Rapid City Regional Hospital's Board. As I discussed this with delegates and officers from other states they were astounded that this type of activity was happening in South Dakota. The one bright part of this picture is the attempt by the SDSMA and the South Dakota Association of Health Care

Organizations to come up with a white paper that will be helpful to the members of both groups. A lot of work has already occurred in the drafting of this report and, hopefully, it will come out soon.

The AMA Interim meeting was held in San Diego, so I felt obligated to sacrifice and attend. Again, this was mostly a housekeeping affair, but several items of interest kept the delegates busy. Several resolutions were specifically designed to make certain the officers and trustees were more responsive to the rank and file than in the not so distant past. Even the Sunbeam issue was briefly mentioned as a reminder of how not to conduct business. The Physicians for Responsible Negotiation (PRN-this is the non-union union of the AMA) was introduced and it is likely that by the time you read this article the first organization will be signed up. Continuous battles with HCFA were described with a few victories, but mostly draws. Keep a close eye on the AMA News for details in this ongoing saga. Discussion of the Campbell/Conyers bill-H.R.1304 and its hopeful passage included an address by Representative Campbell. The AMA lost money last year but did have a small increase in membership (mostly medical students). The intense lobbying effort for the Norwood-Dingell Patients Bill of Rights, which passed the House, was applauded, but it will probably all come to naught unless a very strong grass roots support system can get it out of conference committee.

The North Central Medical Conference was again full of provocative ideas. The speakers were excellent and the exchange of information helpful. As I said before, this is definitely a meeting to attend. Besides the shopping in the Twin Cities there is a great opportunity to meet your colleagues from neighboring states.

The New Year will be here by the time this is published. Our legislative session and winter will both be in full swing. To protect your health and well being please pay close attention to both of them. Stay involved, stay active, and stay healthy in the New Year and the new millennium.



**Ronda Stensland, President
South Dakota State Medical Association Alliance**

It's that time again, mid January. The beginning of the legislative session in Pierre. A time when all of us in the family of medicine tilt one ear toward the capital as things unfold that may affect health care and the environment in which our spouses practice that care. It is also a time when Dean Krogman, SDSMA Lobbyist, positions himself on the front lines ready to do battle for the physicians of our state.

Last month, Governor Janklow stood in the chambers of the capital building to deliver the FY2001 Budget Message to the residents of South Dakota. After listening to small sound bites on the evening news and reading a portion of his address in the local paper, my interest was peaked regarding how he proposed to spend nearly \$2.3 billion. His fiscal approach to health care was of particular interest. I logged on to the governor's web site (www.state.sd.us) and proceeded to read all 13 pages of his proposed budget. I discovered some points of interest that I would like to share with you.

The following are excerpts from Governor William J. Janklow's Budget Address to the South Dakota Legislature, December 7, 1999.

"... this budget recognizes that in the most agricultural state in the Union, we have a crop that's far more valuable than money. It's called the crop of young children that are born every single year in South Dakota. It's called those young children that are born with the hopes and all the dreams and all the aspirations that any child has and that, for whatever reasons, they can reach the point of not fulfilling them. And you and I have a responsibility to make sure that every child has a fair start. We can't give them all an equal start. The circumstances of parenting and the circumstances of economics and geography and a host of things guarantee that there is no equal start, but you and I have a responsibility to make sure that every kid has a fair start ..."

"... As a woman finds herself in a pregnant condition, as she finds herself with child, we've got to make sure that they have the doctor visits that are necessary to make sure that she is healthy and her baby is healthy. We've got to make sure that she gets the advice that deals with tobacco and alcohol and drugs. We've got to make sure that she gets the advice that deals with nutrition and her own health and how that can affect the child that she's carrying ..."

"... We're going to have an early intervention program where before the age of three we will have examined every child in South Dakota for health, and hearing, and vision ..."

"... We're going to propose a program this year where the state provides for the funding necessary to give all the kids the chickenpox shots . . . that every child in South Dakota 0-18 months and every 5 year old in South Dakota gets shots . . ."

"... I'm going to ask the Legislature for permission to come before you sometime during the first or second week of the Legislature so we can talk, in special address, about the tobacco funds. There's a lot of speculation on what to do with this tobacco money . . . We were supposed to get over \$30 million, we got \$27 million . . . So the only point that I'm making is, we have legitimate uses that, between us all, we can find to do things on behalf of the citizens and taxpayers . . ."*

Did I peak your interest? In the months ahead, many

issues regarding the health of our youth will be in the hands of our legislators. To keep you informed, the South Dakota State Medical Association sends the *Grab Bag* to all of its members. This gives the status of pending bills and communicates the SDSMA's position on those bills. You can also log on to the web site address given previously and receive legislative information at any time.

So, let us not turn a deaf ear toward Pierre. And, when Dean calls upon the SDSMA Alliance for assistance, we must respond swiftly and effectively.

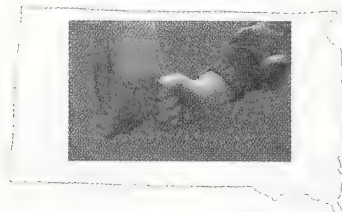
Ronda Stensland

*To learn more about the SDSMA and SDSMAA position on tobacco money, read the article in the Winter issue of the *South Dakota Medical Alliance News*, by Jean McHale, SDSMAA Legislative Chair. The Day at the Capital for Alliance members is scheduled for February 16, 2000. More details can also be found in the Winter issue of the newsletter.

Thanks to these additional physicians, spouses, students, and family members who add their hands to reach across the state and help little hands!

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The ECHO Outbreak Of 1998



From April-September of 1998, there was an outbreak of “aseptic” meningitis (AM) due to enteric cytopathogenic human orphan (ECHO) virus, serotype 30 (E30) in western South Dakota. A total of 86 cases were reported, with an age range of 11 days to 53 years of age. The outbreak affected mainly infants and children with over 75% of the cases affecting those under 20 years of age.

Enteric cytopathogenic human orphan virus, serotype 30, is in the genus enterovirus, one of the four genera of the family Picornaviridae (small RNA viruses). The name for enterovirus is derived from the habitat of these viruses in the intestinal or enteric tract. The genus enterovirus includes poliovirus (3 serotypes) coxsackie A virus (23 serotypes), coxsackie B virus (6 serotypes), and echovirus (31 serotypes). The remainder are named enterovirus with a serotype-i.d. enterovirus 68-71. The human hepatitis A virus, originally classified as enterovirus 72, is now classified in a new genus of hepatovirus. The word cytopathogenic in enteric cytopathogenic human orphan, stands for the effect on tissue culture cells and orphan stands for the fact that the virus was found before a specific disease was linked to the organism. However, echovirus can produce many different types of clinical infection as described below.

The enteroviruses are found worldwide and are transmitted by the fecal-oral or perhaps respiratory routes. They multiply in the gastrointestinal tract lymphoid tissue. Most enteroviral infections take place in the late summer or early fall when water is most likely to be contaminated. An initial viremia occurs which may cause nonspecific symptoms, but may lead to a second phase of organ localization with damage and secondary viremia. The enteroviruses may cause inapparent to serious organ infection in the secondary phase. The best known is the secondary grey matter infection of the spinal cord and bulbar area of the brain in paralytic poliomyelitis. Myocarditis and pancarditis, as well as pleurodynia, have been associated with the coxsackie viruses. Although poliovirus is the main cause of paralytic disease, coxsackie and echoviruses rarely are associated with paralysis, encephalitis, or

myelitic. Recently, an encephalitis outbreak in Taiwan and other countries has been described due to enterovirus 71. Enteroviruses are frequent causes of febrile exanthems, respiratory “flu” like illness and can be isolated from patients with diarrhea.

The common condition caused by all the groups of enterovirus is “aseptic meningitis” (AM). The term is a poor one because it would seem to mean that there are no organisms isolated. Actually, it means that the usual cultures for bacteria are negative. However, obviously the infection is not aseptic since a virus is isolated. A term viral meningitis is often used more or less synonymously for a meningitis with predominantly lymphocytes in the CSF, a normal or mildly elevated CSF protein and a normal CSF glucose. There is a problem with this term as well since the above CSF findings can be seen in not only other viral meningitides, but meningeal infection caused by fungi, mycobacteria (tuberculosis), spirochetes (Lyme disease and syphilis) and even bacteria. The distinction between a viral and bacterial meningitis is clinically important because of the high morbidity and mortality of bacterial meningitis, which requires prompt and intensive antibiotic therapy.

There are significant diagnostic difficulties in separating bacterial from viral meningitis. The previously taught use of segmented neutrophils and/or decreased glucose in the CSF to indicate bacterial meningitis as opposed to lymphocytes and normal glucose in viral meningitis are not reliable criteria to distinguish bacterial from viral or aseptic meningitis. In fact, there are no absolutely reliable clinical or laboratory criteria for characterization of the cause of meningitis other than the identification of the causal organism by culture or antigenic methods. Bacterial culture if negative after 48 to 72 hours is helpful, but delays diagnosis and may be false negative, especially if antibiotic treatment has been given before the CSF specimen is obtained. The time to isolate an enterovirus may be one to seven days from CSF, throat, or stool. Isolation of virus from the CSF is considered diagnostic, but isolation of virus from the throat or stool in a patient with AM only indicates a presumptive diagnosis which, however, is fairly reliable with good clinical correlation.

Many physicians tend to treat patients with AM with antibiotics until results of both bacterial and viral cultures are available. This may be about a week in some instances. There is no effective antimicrobial therapy for enterovirus.

A more rapid and more sensitive test for antigen using polymerase chain reaction (PCR), which can detect almost all serotypes of enterovirus and give a positive reading for enterovirus within a few hours of obtaining the specimen, is becoming more widely available. The test is highly specific and probably more sensitive than culture on CSF specimens. The rapid diagnosis of enteroviral meningitis may result in elimination of up to 72 hours of unnecessary antibiotic treatment and hospitalization. Any reduction in antibiotic usage because of this rapid testing will assist in the battle against increasing antimicrobial resistance. This test will be available in the USD Viral Laboratory before the next "enterovirus season" and should be able to reduce the period of uncertainty as to the cause of meningitis.

J.F. Barlow, MD
Editor

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Extenuating Circumstances

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Hospice Care In South Dakota: Half-Way There

Cristina A. Hill, MS III; Richard P. Holm, MD

It is generally perceived that traditional end of life health care has emphasized high-tech desperate efforts to “cure” and to “keep people alive” rather than to help people face their inevitable dying process gently and realistically.

The first formal hospice program was developed to appropriately emphasize the reduction of suffering, and when appropriate, redirect the goal for pain and symptom control and palliation rather than cure. This care process was developed in England and came to the United States in 1974.¹ Hospice then spread to South Dakota in 1983, and eventually to rural places like Brookings, SD, in 1995.

The availability of Hospice Care in the United States has dramatically increased in the past decade. In 1996, approximately 450,000 Medicare patients in the United States used licensed hospice care, a 50,000 increase from 1995.² Hospice facilities are also rapidly developing, and they have started to encompass rural America. South Dakota has 25 Medicare reimbursed facilities as of 1997.³ Nationwide, however, only one-third of terminal cancer patients are using hospice, while 61% of all U.S. citizens die in hospitals and 17% die in nursing homes.⁴

Although it has been available for four years in the rural county of Brookings, the question remains: how well is hospice care being utilized? The objective of this study is to answer several questions. Do physicians offer hospice care to terminal cancer patients? Are patients then accepting the option of hospice? Are patients being enrolled soon enough to utilize the services of hospice care? Finally, are physicians asking terminal patients about advanced directives?

A comprehensive review was undertaken of the charts of 21 of the 41 cancer patients who died in Brookings County, South Dakota in 1997. Brookings County was the site of this study. The 1990 population of Brookings County was 25,207; the ethnic background was 97.8% white and 0.6% Native American.⁵ Brookings County has 11.8 full-time equivalent primary care physicians.⁶

The study looked exclusively at patients under the care of Brookings Hospital and Hospice and Brookings Clinic, PA. Brookings Hospital is a 61 bed facility, serving an area of 30,000 people. It has a 71 bed nursing home associated with it. The Hospice Program, under the guidance of Brookings Hospital, was established in 1995, serving 15 terminally ill people yearly. Brookings Clinic is a 15 member, multi-specialty group that served a catchment approximately the same as Brookings Hospital in 1997.

A computer search at Brookings Hospital provided a listing of patients who died of cancer in 1997. These individuals had been patients who died in the hospital, nursing home, or in hospice care at Brookings Hospital. The charts of 21 deceased patients were provided for the study. We developed an analytical model for the chart review. Both lifetime hospital and clinic charts were reviewed. The physician who made the referral to hospice was noted. Referral by a physician was classified into two groupings: by local primary care physician (11 referrals), or by specialty physician (2 oncologist referrals). Patients not referred for hospice care were also analyzed and grouped. The groupings included: lack of suitable caregiver (1 patient), preference of non-hospice institution (5 patients), or other (2 patients).

RESULTS

Cancer is the second leading killer in the United States and in South Dakota, behind cardiovascular disease. Brookings County had 41 deaths due to cancer in 1997. The total age-adjusted rate, adjusting populations to the standard million then per 100,000 individuals, was 126.6. South Dakota in 1997 had 1548 deaths due to cancer, an age-adjusted rate of 161.7. The United States had an age-adjusted death rate of 129.9.⁷

Twelve males and nine females were subjects of the study. Thirteen of the 21 cancer patients were enrolled in hospice care, eight males and five females. All were Caucasian. Age of the subjects ranged from 53 to 91 years old at the time of death. The average age of the subjects was 73 years. There were a total of 15 different

ICD-9 codes documented as primary tumor sites. Neoplasms were grouped according to the South Dakota Cancer Mortality 1970-1994 groupings of ICD-9 codes.⁸ The results of specified groupings of neoplasms included: malignant neoplasm of digestive organs and peritoneum (7); malignant neoplasm of lymphatic and hematopoietic tissue (4); malignant neoplasm of genitourinary organs (4); malignant neoplasm of other and unspecified sites (2); malignant neoplasm of respiratory and intrathoracic organs (2); and malignant neoplasm of lip, oral cavity and pharynx (1). The leading causes of cancer mortality for South Dakota residents, by anatomical location for 1997, were: malignant neoplasm of respiratory and intrathoracic organs - 389; malignant neoplasm of digestive organs and peritoneum - 295; malignant neoplasm of genitourinary organs - 198; malignant neoplasm of bone, connective tissue, skin and breast (170-175) - 115; malignant neoplasm of lymphatic and hematopoietic tissue - 63; and malignant neoplasm of other and unspecified sites - 488.

Length of care in hospice ranged from 4 to 97 days. The average time in hospice care was 24 days. Medicare patients are allowed up to 180 days in hospice coverage.

The existence of advance directives (a living will, durable power of attorney, or a do not resuscitate order) was also noted. Seventeen of the 21 cancer patients had some type of advanced directives. Six of the eight non-hospice members had advance directives. One patient had all three directives; three patients had a living will and a durable power of attorney; and two patients possessed a do not resuscitate order. Two non-hospice patients had no type of advanced directives. Of the 13 hospice members, seven patients possessed a living will, durable power of attorney, and a do not resuscitate order; one patient possessed a living will and a durable power of attorney; three patients possessed a do not resuscitate order. Two of the hospice patients did not have any type of advanced directives.

It was also noted that hospice care was described and discussed with all eight non-hospice terminal cancer patients.

CONCLUSIONS

Utilization of hospice care for patients at Brookings Hospital was above the national average. Brookings Hospital had a 61.9% enrollment of 13 to 21 terminal cancer patients in hospice care. This is better than a nationwide average of one-third of all cancer patients being involved in hospice care.⁹ No information is known about the 20 other cancer deaths in Brookings County.

The time in hospice care was lower than the national average, however. Average stay in hospice care for

patients in Brookings County was 24.3 days. A nationwide average was 54.4 days for Medicare beneficiaries in 1997.¹⁰

The high rate of possession of advance directives was encouraging. One should note that advance directives are usually discussed and required for a patient to enroll in a hospice program. Only 11 of 13 hospice patients in Brookings possessed directives, displaying that some patients have managed to circumvent the requirements necessary to enter hospice care. There could be a variety of explanations for this situation. One reason could be that perhaps the patients and their families are not willing to make the final decisions about their care.

We can conclude that physicians in Brookings are doing an adequate job of referring cancer patients to hospice, but they are not referring the patients soon enough. Patients are allotted 180 days of hospice care that is reimbursed by Medicare, but in Brookings County they are scarcely using a month of the services. One possible explanation may be the physician's difficulty to determine how long a patient has to live before his or her death. Another reason may be the decision of the family and patient to seek curative treatment of the disease as long as possible.

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State Of South Dakota's Child: 1999

Ann L. Wilson, PhD

Editorial Comment

The millennium is here and this annual *State of the Child* report brings to us the data that measure our success in providing healthy beginnings for babies in South Dakota. Dr. Wilson's report this year points to the challenges we face as our state's infant mortality rate is examined. In South Dakota, Sudden Infant Death Syndrome represents too common a tragedy for those who know and love a baby who dies from this cause. Decreasing the risk factors for these deaths include putting babies on their backs to sleep and assuring that they are not exposed to smoking before or after birth.

In her report, Dr. Wilson also advocates practices and attitudes that promote breast-feeding. Governor Janklow is to be congratulated for his effort to support this important care practice for babies of state employees. The USD School of Medicine certainly is assuring that this support is provided to all mothers on its staff and faculty. We urge all those in the state who employ new mothers to find ways to assure that they have the necessary provisions to assist their ability to continue to nurse their babies once they return to their place of employment following delivery.

In closing, I must say, there is a bit of irony in this millennium report that promotes with scientific data a care practice that has accompanied the care of babies since the beginning of humankind. Our grandmothers would be proud!

Robert C. Talley, MD
Vice President and Dean
School of Medicine
University of South Dakota

ABSTRACT

The Surgeon General's Year 2000 health goals for the nation are presented and data from South Dakota and the United States that measure progress toward achieving them are discussed. The percentage of low-birth weight babies (LBW) in South Dakota is lower than observed nationally, but, similar to the national trend, has increased in the past few years. Between 1996-1998, 1.1% of all newborns in the state weighed less than 1500 grams, and 5.7% weighed less than 2500 grams. There has been continuing progress observed in the survival rate of the very low birth weight infant. In 1996 the state experienced a precipitous drop in its infant mortality rate (IMR) that has not been sustained in the past two years. The state's 1998 IMR of 9.0 per 1000 live births, however, is less than the mean rate of 10 that persisted over the previous decade. The IMR for white babies (5.7) has achieved the Year 2000 Goal. The rate of Sudden Infant Death in South Dakota is significantly higher ($p<.001$) than that observed nationally and speaks to the importance of placing babies on their backs to sleep and education regarding the risks associated with exposing a fetus and baby to smoking. The special topic of this year's report is breast-feeding. The benefits of breast-feeding to babies and mothers are described, as well as the need for it to be advocated by the health care community. This advocacy must emphasize breast-feeding's importance, how women can be assisted as they begin to nurse, and how community efforts can be taken to enable breast-feeding continuation when women return to work following delivery.

The Year 2000 is a milestone year for examining progress in the achievement of the Surgeon General's millennium goals for children's health. While there is always a lag between the calendar date and the year of data available to assess health outcomes, Figure 1 presents data revealing progress toward the achievement of these goals.¹⁻⁷ In addition to discussing these findings, this year's report will address, as its

with the exceptions of Lincoln, Mead, and Minnehaha, have had a decrease in the number of resident births.⁸ There has been an overall 29% decrease in the total number of births of residents in the state. Figure 2 shows that this trend was interrupted in 1998 with a slight increase of 113 more new babies joining the state than in the previous year.³ Complementing the gradual decrease in infant births has been an increase in the diversity of the state's population with the percentage of total births represented by minorities increasing again in 1998 with American Indians comprising 17% of all newborns.³

As noted in Figure 1, the Surgeon General established as goal for the Year 2000 a 5% rate of low birth weight (LBW = <2500 grams) and a 1% rate of very low birth weight (VLBW = <1500 grams).⁹ South Dakota's rates of very low and low birth weight are lower than those observed nationally (1.1 and 5.7%) with the VLBW rate for whites actually achieving its Year 2000 Goal. Important, however, is how South Dakota's rates of small newborns, paralleling national trends, are increasing rather than decreasing. This upward trend in rates of low birth weight is influenced, in part, by the increase in multiple births.⁵ In South Dakota, between 1996 and 1998, almost 12% of all newborns who were a part of a multiple birth weighed less than 1500 grams.³ This was true of slightly less than 1% of all singleton births. There has also been a slight

increase in very low birth weight for singleton newborns. This most likely reflects advances in perinatal care that prolongs high risk pregnancies and the birth of viable, albeit, preterm, newborns.

Low birth weight newborns contribute to about half of all infant mortality in South Dakota.¹⁻³ If survival rates for tiny babies do not continue to improve, the increased incidence of LBW will contribute to rising rates of infant mortality. As noted in Figure 3, such progress in survival of low birth weight newborns is being observed in South Dakota with 68% of babies weighing 500 to 999 grams now surviving compared to a 60% survival rate between the years 1993-95.¹⁻³

Prenatal care improves the outcome of pregnancies.¹⁰⁻¹² Vigilance in assuring that women receive this care in the first trimesters of their pregnancies is essential. The data presented in Figure 1 show that South Dakota's use of

Figure 1

US Surgeon General's Goals for Year 2000			
✓ = Goal Achieved			
Low Birth Weight: 5% of all births			
SD White	5.7%	US White	6.0%
SD Am Indian	5.6%	US Am Indian	7.8%
SD Total	5.7%	US Total	7.2%
Very Low Birth Weight: 1% of all births			
✓ SD White	1.0%	US White	1.1%
SD Am Indian	1.4%	US Am Indian	1.2%
SD Total	1.1%	US Total	1.4%
Prenatal Care: 90% First Trimester Care			
SD White	86%	US White	85%
SD Am Indian	63%	US Am Indian	68%
SD Total	82%	US Total	83%
Infant Deaths: 7 per 1,000 live births			
✓ SD White	5.7	✓ US White	6.0
SD Am Indian	16.2	US Am Indian	7.8
SD Total	7.4	US Total	7.2
Breast-feeding: 75% early postpartum/50% continuation to 5-6 months			
SD Total	62%/23%	US Total	60%/22%

South Dakota data on births and deaths from SD Department of Health, 1996-1998.¹⁻³
 United States data on births and deaths from the National Center for Health Statistics, 1997.⁴⁻⁵
 South Dakota data on breast-feeding from SD Department of Health, 1997.⁶
 United States data on breast-feeding from 1995.⁷

special topic, breast-feeding and how communities can support new mothers in their efforts to provide this important care for their infants.

Births

In the past two decades every county in the state,

Figure 2

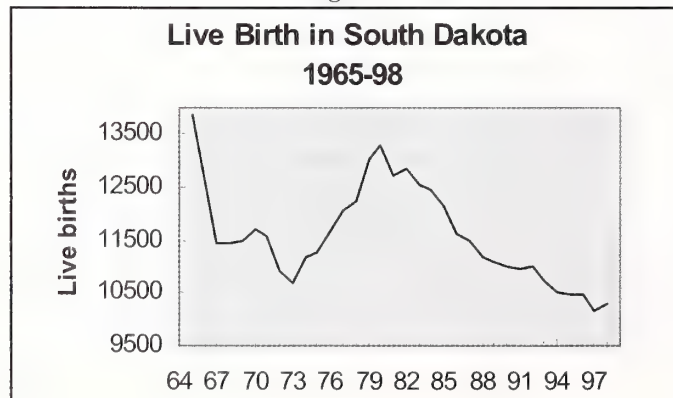
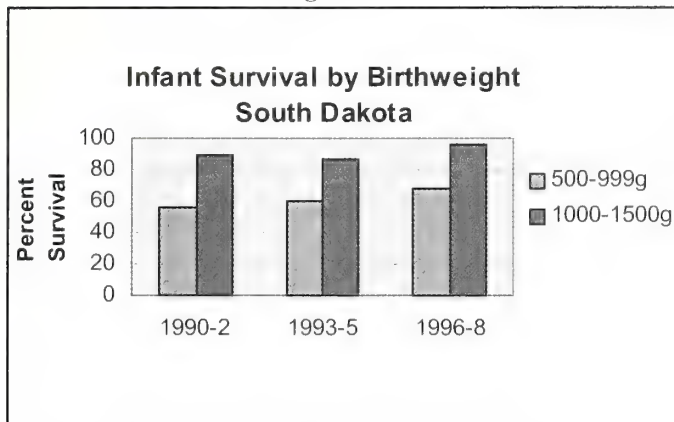


Figure 3

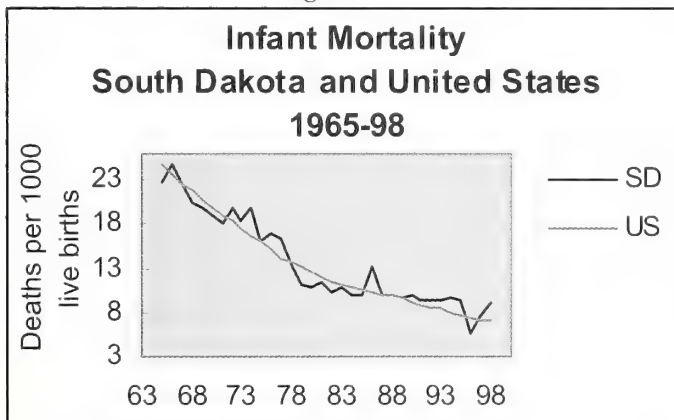


prenatal care parallels national observations. In the state 86% of the white population receives early prenatal care, while 68% of its American Indian women initiate care during the important trimester of pregnancy.

Infant Mortality

Figure 4 shows that South Dakota's most recent infant mortality rate of 9.0 per 1,000 live births is above the rate experienced by the United States.^{3, 13} The state's drop in mortality, noted in 1996, has not been sustained.

Figure 4



The 1997 and 1998 rates, however, do reflect improvement over the mean rate of 10 that persisted over the previous decade.²⁻³ The mean rate for 1996-8 is approaching the goal of 7.0 for the year 2000. Noted also in Figure 1 is the disparity in the state's infant mortality rates for the white and American Indian populations. Similar to the United States, South Dakota's white population has actually already achieved the Year 2000 goal of a rate less than 7.0, but this rate is one third that noted for the state's American Indian babies.

To better understand the racial discrepancies in the infant mortality rates in South Dakota, analyses of the rates of neonatal mortality (deaths of infants less than 28 days) and post neonatal mortality (deaths of infants between 28 and 365 days of age) are helpful. Figure 5 presents data that compare mortality rates in both South Dakota and the United States' white and minority racial groups (88% American Indian in the state).^{2-4, 13-16} These data show that babies representing minority racial groups are twice as likely as white babies to die during both the neonatal and the post neonatal period of time. Racial comparisons between South Dakota and United States data show that during the neonatal period mortality rates are quite comparable for both whites and babies of color. This differs from what is observed during the post neonatal period of life. During this time, both white and minority post neonatal rates are higher in South Dakota than they are nationally with the minority rates four times higher than those noted nationally.

Table 1 presents data on causes of infant death for South Dakota and the United States.^{1-3,5} Most apparent is how, compared to US rates, South Dakota's rate of infant death due to Sudden Infant Death Syndrome (SIDS) is significantly higher ($p = .001$). When these data are broken down by racial groups, it is observed that South Dakota's rate of SIDS for white babies is almost double the US rate and is almost four times higher than the nation's rate for babies of color. This observation contributes to an understanding of the discrepancy noted in Figure 5 in the United States and South Dakota's post neonatal mortality rates. South Dakota's rate of infant death due to pneumonia and influenza is also significantly higher ($p < .05$) than the national rate. Alternately, the rate of death due to perinatal causes (e.g.

Figure 5

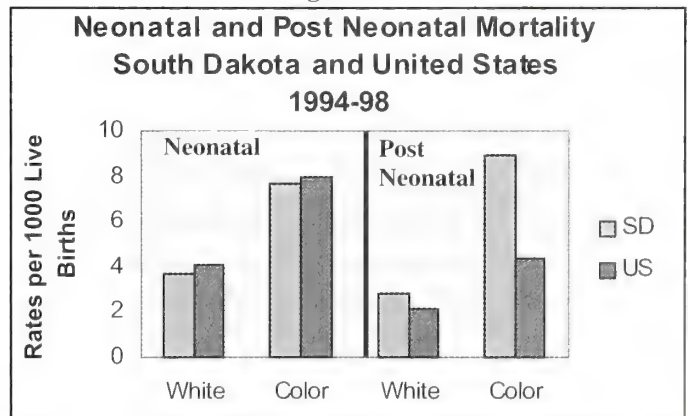


Table 1

RATES OF INFANT DEATH: SOUTH DAKOTA AND UNITED STATES		
CAUSES	SOUTH DAKOTA 1996-98	UNITED STATES 1997
Sudden Infant Death	1.65**	0.77
Congenital Anomalies	1.68	1.59
Perinatal Causes	2.43*	3.33
Injuries and Homicide	0.46	0.28
Pneumonia and Influenza	0.23*	0.11
Other Causes	1	1.15
Total	7.45	7.23

Note: Rates per 1,000 births.

South Dakota data from the South Dakota Department of Health.¹⁻³

US data from the National Center for Health Statistics.⁴

*p=.001; **p<.05

respiratory distress syndrome, infections specific to the perinatal period, newborn affected by maternal complications of pregnancy) is significantly lower ($p < .05$).

Troubling are the observations that have accompanied an examination of deaths in Minnehaha County by its recently developed Infant and Child Mortality Review Committee.¹⁷ This committee's in depth reviews of cases of Sudden Infant Death have shown that nearly all were babies put to sleep in a prone position and many were exposed pre and post nately to smoking. This observation highlights the need for enhanced education for parents, extended family members, and day care providers on the importance of putting babies on their "back to sleep." The American Academy of Pediatrics in 1994 issued a position statement on the importance of non-prone sleeping in decreasing the risk of SIDS.¹⁸ This message needs to be heard and seen by all families with modeling of this care practice during newborns' hospital stays and through ongoing well baby visits to any provider of health care. Currently only 53% of babies in South Dakota are put to bed on their backs with the remaining placed on their sides or stomach.⁶

The dangers of smoking during pregnancy and exposing an infant to passive smoking are unequivocal.¹⁹⁻²¹ South Dakota data show that 25% of women smoke during pregnancy and after the birth of their baby.⁶ Education, cessation programs, and equally important, policies that impede youth's initiation of smoking are essential if this behavior dangerous to the

survival and health of babies is to be eliminated.

Breast-feeding

Recently Governor Janklow has articulated the state's interest in research demonstrating the importance of early experience on brain development.²² Among the findings that have been highlighted by various state educational programs on this topic have been those showing a correlation between breast-feeding and intelligence.²³ Such findings may reflect a variety of intervening variables and correlates related to parental choice of infant feeding style, nonetheless, the benefits of breast-feeding are numerous.

Breast-feeding is recognized as the preferred form of infant nutrition by the American Academy of Pediatrics,²⁴ American College of Obstetricians and Gynecologists,²⁵ and the American Academy of Family Physicians.²⁶ In its policy statement on breast-feeding, the American Academy of Pediatrics (AAP) notes that *research in the US, Canada, Europe and other developed countries among predominantly middle-class populations, provides strong evidence that human milk feeding decreases the incidence and/or severity of diarrhea, lower respiratory infection, otitis media, bacteremia, bacterial meningitis, botulism, urinary tract infection, and necrotizing enterocolitis. There are a number of studies that show a possible protective effect of human milk feeding against sudden infant death syndrome, insulin-dependent diabetes mellitus, Crohn's disease, ulcerative colitis, lymphoma, allergic diseases, and other chronic digestive diseases. Breast-feeding has also been related to possible enhancement of*

cognitive development (p 1035). While it has long been known that breast-feeding decreases post partum blood loss by stimulating the involution of the uterus, recent summaries of research describe that lactating women have an earlier return to prepregnant weight and have improved post partum bone remineralization and a reduction in post menopausal hip fractures.²⁴ Women who breast feed also have a reduced risk of ovarian cancer and premenopausal breast cancer.²⁴

Breast-feeding has unequivocal advantages for both mother and baby and society also benefits from this form of infant feeding.²⁷ With fewer illness among breast-fed babies, health care costs decrease and time lost from employment to care for an ill baby are also less likely for parents of a breast fed infant. Overall, breast-feeding is less costly than bottle feeding.^{24,28}

Recognizing these advantages of breast-feeding, the Surgeon General established among the Year 2000 Goals the aim of achieving a 75% rate of initiating breast-feeding in the early post partum period and at least a 50% rate of continuation of breast-feeding until infants are 5-6 months of age.⁹ As noted in Figure 1, South Dakota and national data are essentially identical showing that approximately 60% of women initiate breast-feeding and 22% continue through the first six months of their babies lives.⁶⁻⁷

With the evidence so overwhelming regarding the advantages of breast-feeding, questions are raised regarding why its prevalence is not higher. The AAP²⁴ (pg. 1036) has identified the following as obstacles to the initiation and continuation of breast-feeding:

- physician apathy and misinformation
- insufficient prenatal breast-feeding education
- disruptive hospital policies
- inappropriate interruption of breast-feeding
- early hospital discharge in some populations
- lack of timely routine follow up care and postpartum home health visits
- maternal employment
- lack of broad societal support
- media portrayal of bottle feeding as normative
- commercial promotion of infant formula through distribution of hospital discharge packs, coupons for free or discounted formula, and TV and general magazine advertising

The challenge becomes one of responding to these barriers. Three ways in which breast-feeding may be promoted will be reviewed: education for health care providers and potential parents, advocacy for the breast-feeding mother in the workforce, and general promotion of breast-feeding as the norm for infant feeding.

To support a woman's ability to breast feed, both her baby's and her health care team must be enthusiastic and knowledgeable regarding this feeding practice. Findings from a variety of studies indicate that post medical graduate training may well be insufficient in this area and that there is room for much improvement in the ability of health care practitioners to provide sound guidance and supportive care.²⁸⁻²⁹ It is during pregnancy when decisions regarding feeding styles are made, and the advantages of breast-feeding need to be conveyed to expectant women and their partners. The actual assistance and support for the initiation and continuation of breast-feeding must be provided by those who care for the mother and baby following delivery. Family physicians can uniquely fill both of these roles with their patients as they provide continuity in care throughout the perinatal period.³⁰ Coordination between those providing obstetric and pediatric care is needed when women and infants receive their care from different practitioners. Experience has shown the power of education provided to women by physicians and its influence in increasing the likelihood of a choice to breast-feed.³¹ Further, consultants credentialed by the International Board of Certified Lactation Consultants (IBCLC) can provide their important training and expertise to new mothers as they nurse their babies.³²

A second and important strategy is to advocate for the nursing woman in the workforce. While prenatal education and postnatal support should promote the initiation of breast-feeding, communities at large need to find ways to facilitate women's ability to continue to nurse their babies. In South Dakota, 70% of mothers of young children are employed outside of their homes.³³ Recognizing the importance of making provisions that foster women's ability to continue to nurse when they return to work following delivery, the Governor of South Dakota in July 1999 issued a policy to support breast feeding mothers at state government work sites.³⁴ This state government policy defines support to "include providing facilities that allow privacy for expressing milk and work place flexibility to schedule time to express milk." Such a state policy is of vital importance in its recognition of how employers can play a critical role in promoting the positive benefits of breast-feeding when women are separated from their infants during their working hours. Several large private companies have also developed similar provisions for their employees and can serve as models for others who want to support this important care for babies that can be impeded by employment.³⁵

Finally, a community sentiment must be built that recognizes that breast-feeding needs to be the norm rather than the exception to routine care of an infant. With its advantages so clearly documented, all efforts should be focused upon its promotion. Hospital

practices of distributing free formula to new parents as a gift have been identified as providing a mixed message regarding the value of breast-feeding.³⁶ Shortened post partum hospital stays also challenge efforts to initiate nursing. However, support from physicians, nurses, lactation consultants, and knowledgeable lay support groups (such as the La Leche) can provide the needed services to manage the gap between hospital and home. Not to be overlooked, is the reality that there are mother-infant pairs for whom nursing may not succeed. There are also rare cases when, for medical reasons, nursing should not begin.²⁴ For these women support needs to guard them from a sense of inadequacy and failure, and enable their transition to bottle feeding. Nevertheless, with adequate care and education, breast-feeding can be a very meaningful and rewarding experience for most mothers and their babies.

At a time in history, when so many pressures challenge parenting, never has the need been greater to infuse its beginning with an experience that nature has given to the birthing process. Feelings of warmth, comfort, and connectedness all are a part of this feeding experience that also give a baby essential nutrition for growth and development. As professionals, family members, neighbors, employers, fellow employees, and citizens, we have a role to play in assuring that babies can begin life with all the advantages that breast feeding may give to them.

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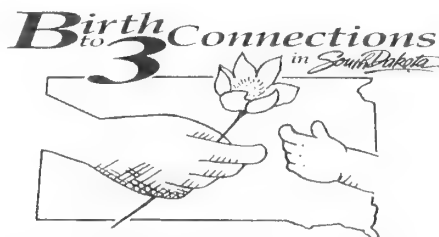
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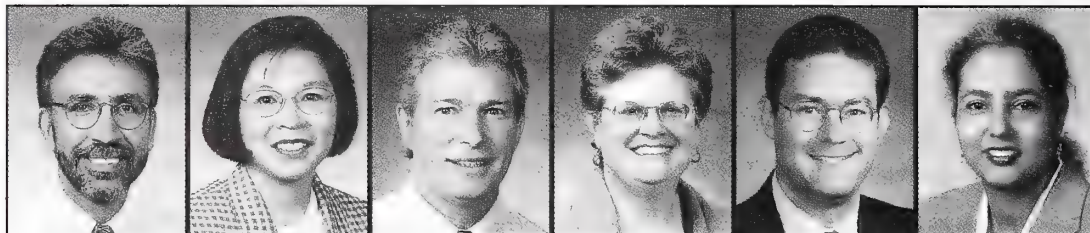
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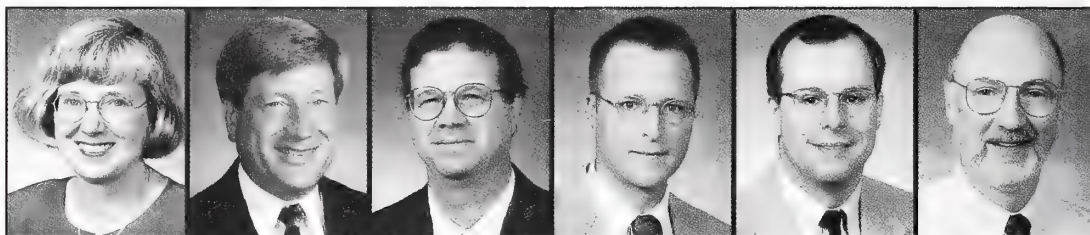
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Low Molecular Weight Heparins In Acute Coronary Syndrome

Freddy Creekmore, PharmD, BCPS; Sioux Falls, SD

Acute coronary syndrome, also known as unstable coronary artery disease, is defined as unstable angina or non-Q-wave myocardial infarction. Standard treatment for patients presenting with acute coronary syndrome includes heparin.^{1,2} Low molecular weight heparins (LMWHs) are a relatively new alternative to unfractionated heparin (UH) for these patients.

Low molecular weight heparin (LMWH) is fractionated porcine heparin, containing a molecular weight range between 2,000 and 9,000 daltons, as opposed to UH which contains a molecular weight range from 3,000 to 30,000 daltons. There are currently three approved LMWHs on the U.S. market, enoxaparin (Lovenox®), dalteparin (Fragmin®), and ardeparin (Normiflo®). Enoxaparin and dalteparin are approved by the FDA for acute coronary syndrome, while ardeparin is not. While UH anticoagulates by affecting thrombin, via anti-thrombin III (ATIII), and factor Xa equally, LMWHs affect factor Xa much more than they affect thrombin. LMWH does not significantly affect the aPTT at therapeutic levels. No specific anticoagulation monitoring is recommended for LMWHs, however, anti-factor Xa levels are sometimes used. Both UH and LMWH may be reversed by protamine.^{3,4,5}

There have been four major trials to date evaluating the use of LMWHs in acute coronary syndromes. These four trials are summarized below.

FRISC⁶ was published in March of 1996. Completing the study were 1,498 patients that had unstable angina or non-Q-wave myocardial infarction. All the patients received aspirin and beta blockers. Dalteparin was given to approximately one-half the patients, every 12 hours for 6 days and then once daily for the next 35-45 days. The other half of the patients received placebo in a randomized double blind fashion. The primary endpoint was rate of death or new myocardial infarction during the first 6 days. During the acute phase, the primary endpoint was reached more frequently in the placebo group, but the actual rate of death in each of the groups was similar. At 40 days, the rate of death or MI was not significantly different between the groups, but the rate of death, MI or

revascularization (a secondary endpoint) was reached more frequently by the placebo group. The incidence of major bleeding was almost identical in the two groups, both in the acute and chronic phase. The incidence of minor bleeding was higher in the dalteparin group both in the acute phase and chronic phase. It was concluded that dalteparin for at least six days was superior to placebo in patients with acute coronary syndrome. This is not surprising since some type of heparin therapy is the standard of care for these patients.

FRIC⁷, published in July of 1997, enrolled 1,482 patients with unstable angina or non-Q-wave myocardial infarction and compared dalteparin to unfractionated heparin. All the patients received aspirin. There were two phases, an unblinded phase one, which lasted for 6 days, where about one-half the patients were randomized to dalteparin every 12 hours. The other half received unfractionated heparin. In a blinded phase two, the patients were randomized again to dalteparin every day or placebo and this lasted for an additional 40 days. The primary endpoint of the study was the incidence of death, myocardial infarction, or the recurrence of angina during phase two of the study. Both groups reached this outcome with the same number of the patients, with none of the individual components of the endpoint being statistically different. The secondary endpoint of the study was the incidence of death, myocardial infarction or the recurrence of angina during phase one of the study. There was not a significant difference between the groups with regard to this endpoint. Major bleeding was almost identical between the groups in both phases of the study. Minor bleeding was only different in phase two of the study with the dalteparin group bleeding more. The conclusion of the study was that dalteparin was a safe and effective alternative to unfractionated heparin for patients with acute coronary syndrome, but that long term treatment with dalteparin added no benefit over aspirin alone. This study did not reach its goal of showing dalteparin was superior to placebo in the chronic phase of treatment and admitted within the text that it did not have the power to demonstrate equivalence of dalteparin and unfractionated heparin in the acute phase of treatment.

Published in August of 1997, 3,171 patients were studied in the ESSENCE⁸ trial. All the patients had unstable angina or a non-Q-wave myocardial infarction and were treated for at least 48 hours and up to 8 days. All the patients received aspirin. The groups were randomly assigned to enoxaparin or UH and were double blinded. The aPTTs in the heparin infusion group were typically targeted to be between 55 and 85 seconds, but at any time, approximately 15% of the patients were subtherapeutic. The primary endpoint was how many patients in each group died, had a myocardial infarction or had recurrent angina by 14 days. Patients in the unfractionated heparin group did achieve the primary endpoint more frequently than the enoxaparin group. Mortality alone was almost identical between the groups. At 30 days, the composite endpoint was still reached less often by the enoxaparin patients, but none of the individual components of the endpoint were significantly different. Bleeding rates were assessed at 30 days. Major bleeding in each of the groups was very similar, but minor bleeding was significantly greater with the enoxaparin patients. The conclusion of the study was that enoxaparin was superior to unfractionated heparin in these patients. While the triple composite score was reached less with the enoxaparin group, mortality went unchanged.

Finally, TIMI 11B⁹ was published in October of 1999. It was a randomized, double blinded, controlled trial with 3,910 patients who had unstable angina or non-Q-wave myocardial infarctions. All patients received aspirin. In the acute phase, lasting until discharge or a maximum of 8 days, about one-half the patients received enoxaparin. The other half of the patients received unfractionated heparin intravenously, managed to maintain the aPTT at 1.5 to 2.5 times control. Only in 42% to 47% of the patients was the aPTT maintained between 55 and 85 seconds when measured at 12 to 96 hours into the infusion. In the chronic phase the heparin infusion patients simply received placebo. The primary endpoint of this study was the incidence of mortality, recurrent myocardial infarction or urgent revascularization at 8 days and at 43 days. At 8 days the enoxaparin group reached the composite endpoint less frequently than the heparin group. The incidence of myocardial infarction was also less in the enoxaparin group. Mortality was very similar between the groups. At 43 days the composite endpoint was still less in the enoxaparin group, but not more so than it was at 8 days. All individual components of the composite were statistically similar. At the end of hospitalization, major hemorrhages were similar between the groups, but minor hemorrhages were more common with enoxaparin. Between days 8 and 43, major hemorrhages and minor hemorrhages were more

common with the enoxaparin group. The conclusions of the study were that enoxaparin is superior to unfractionated heparin in the acute treatment phase of acute coronary syndrome, but that continuing enoxaparin past the hospitalization of the patient is of no added benefit and increases the risk of bleeding. It is once again worth remembering that mortality was not changed with enoxaparin.

Low molecular weight heparins are a viable alternative to unfractionated heparin for the acute treatment of patients with unstable angina or non-Q-wave myocardial infarction. There is no role for them after the hospital phase. The LMWHs are convenient to administer without an intravenous line and require no routine laboratory monitoring. On the down side, the LMWHs are expensive. For the average patient, the daily cost to the hospital of the LMWH will be from \$50 to \$90, depending on the agent chosen, the weight of the patient, and the hospital acquisition costs. The cost of minor bleeds with the LMWHs must also be added into the equation. Meanwhile, the daily cost of unfractionated heparin will be less than \$10, with lab work and tubing costing the hospital another \$10 to \$20 per day for a total of less than \$30 per day. If the LMWHs are superior to UH, this cost difference would be more than offset. Whether they are truly superior to UH can still be debated. If the trials would have been able to maintain the heparin infusion patients within the therapeutic range more consistently, perhaps the results would have been different. Additionally, the trials were unable to demonstrate a difference in mortality, or any individual component of the endpoints after 30 days. In acute coronary syndrome patients where maintaining an IV line is difficult, or where maintaining a consistently therapeutic aPTT is problematic, low molecular weight heparins may be a wise choice for their anticoagulation. In other patients, the verdict may still be out as to which is the more cost effective choice between low molecular weight heparins and traditional unfractionated heparin infusions.

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Pneumonia	<ol style="list-style-type: none"> 13. Influenza vaccinations 14. Pneumococcal vaccinations 15. Blood culture before antibiotics are administered 16. Appropriate initial empiric antibiotic selection 17. Initial antibiotic dose within 8 hours of hospital arrival 18. Influenza vaccination or appropriate screening 19. Pneumococcal vaccination or appropriate screening 	<p>#13 and #14 -- Claims (possibly supplemented or replaced by CDCs BRFSS survey)</p> <p>#15 - 19 -- Hospital medical records for pneumonia patients</p>
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Epidemiology Of Physical And Sexual Abuse In Young Persons Diagnosed With Conduct Disorder: A Retrospective Chart Review

Stefan E. Schulenberg, MA; Tim Soundy, MD

ABSTRACT

The purpose of this study was to examine the existence of a history of physical and/or sexual abuse in adolescents diagnosed with Conduct Disorder. A retrospective chart review was undertaken at a Midwestern inpatient mental health facility. Files of adolescents diagnosed with Conduct Disorder, and who were admitted to this inpatient facility in 1995, were reviewed ($n = 18$). Fisher's exact probability tests were performed comparing the data gathered with statistics compiled by the U.S. Department of Health and Human Services (1998). The results suggest that the frequency of physical and sexual abuse is significantly greater than rates for the population at large. Implications for future research are discussed.

It has been noted that children who have been mistreated¹ suffer a greater risk of experiencing mental illness. One problem in particular that is related to these circumstances is Conduct Disorder. Conduct Disorder consists of a consistent pattern of maladaptive behaviors in which either societal conventions or the rights of others are disregarded.² Examples of these maladaptive behaviors include, but are not limited to, fire-setting, truancy, the manipulation of others, and being cruel to people and/or animals, and tends to occur in youths under the age of 18. These behaviors are damaging to society in terms of their collective impact on people and property. If certain correlates of conduct-disordered behavior can be identified, then the chances are increased for individuals who demonstrate these behavioral patterns to achieve their potential. Certainly, with some 25% of teenage adolescents going on to develop antisocial personality disorder as adults (Lock³), adding support for the idea that the identification of risk factors is an integral component in ameliorating the consequences of these negative patterns of behavior.

Steiner and Matthews⁴, in a chapter relating to psychiatric trauma and associated pathology, noted the role that physical and sexual abuse may play with regard

to trauma-related disorders and symptoms, including a growing demonstration of delinquent behaviors. Lewis⁵ also stated the relationship between children with severe behavioral problems and psychosocial histories of sexual and/or physical abuse. Bowers,⁶ in an article relating to delinquency in females, described the proclivity of traumas such as physical and sexual abuse to act as precursors of acting out behaviors, and Lock³ suggested that an "abusive and neglectful upbringing" (p.62), is associated with the development of conduct-disordered behaviors. Lewis⁵ noted that these types of abuse (physical and sexual) tend to not be recognized, not be reported, and are therefore "overlooked." (p.450) In a similar vein, Livingston⁷ reported a diagnosis of Conduct Disorder in 13 of 15 child psychiatric patients who had been physically abused and 5 of 13 who had been sexually abused. Livingston, Lawson, and Jones¹ indicated that early intervention (e.g., with young abused boys) might derail the development of conduct-disordered behaviors.

The U.S. Department of Health and Human Services⁸ reported the incidence for all forms of child abuse (physical, sexual, emotional, neglect) to occur in the U.S. population at a rate of 15 victims per 1,000. These figures are for the year 1996. They also reported that,

of this rate, about 24% were physically abused, while about 12% were sexually abused. This study was geared specifically toward examining physical and sexual abuse in a population of individuals diagnosed with Conduct Disorder. Using the figures previously described, approximate national rates for physical and sexual abuse in children were calculated to be about 3.6 per 1,000 and 1.8 per 1,000, respectively. Examples of physical abuse include a child's being beaten and/or burned, whereas sexual abuse includes being raped, fondled, and/or sodomized.

METHODS

The data collected during the course of this study was gathered via a retrospective chart review. Charts were selected based on a diagnosis of Conduct Disorder in conjunction with the individual's admittance to a Midwestern inpatient mental health facility during the calendar year of 1995. Eighteen files fit this description, and were systematically reviewed. Demographic information relating to the person's history of physical and/or sexual abuse was taken. This information was gathered from patient psychosocial histories, which consisted of three separate reports generated by social

workers, psychologists, and psychiatrists. These three types of reports were present in all 18 files. The researchers did not seek to access any other information present in the files to maintain the similarity of the data collected across files. The overall sample consisted of the records of 8 young men (ages ranged from 14 to 17, mean age = 15.13 years) and 10 young women (ages ranged from 14 to 17, mean age = 15.30 years). The mean age for the entire sample was 15.22 years. Most often, the adolescents were diagnosed with disorders in addition to Conduct Disorder, such as psychoactive substance abuse and/or dependence, depression, and/or Attention-Deficit Hyperactivity Disorder.

Although the definitions for physical and sexual abuse as described above seem relatively clear, at times it was difficult to determine whether an adolescent had been physically and/or sexually abused based on the information obtained because of a variety of reasons. The accuracy of the reports made by several of the adolescents was noted as being questionable due to the nature of the circumstances surrounding their interviews with the mental health professionals. Also, there were instances when one mental health professional's

Table 1

Observed vs. Expected Frequencies of Physical Abuse Histories

	Observed Frequency	Expected Frequency	Statistical Significance	
No History	5	17	p<.001	p<.001
History of Physical Abuse	13	1	p<.001	
Total	18	18		

Observed vs. Expected Frequencies of Sexual Abuse Histories

	Observed Frequency	Expected Frequency	Statistical Significance	
No History	4	17	p<.001	p<.001
History of Sexual Abuse	14	1	p<.001	
Total	18	18		

Note: Expected frequencies were calculated based on the national data noted earlier in this article, namely, 3.6 youths per 1,000 and 1.8 youths per 1,000 for physical and sexual abuse, respectively. Given this study's sample size of 18, these numbers were rounded to an expected frequency of one.

evaluation held information relating to physical and/or sexual abuse that was not to be found in other reports. Also, no attempt was made by the authors to evaluate the pervasiveness and intensity of the adolescent's abusive experiences, as this information was not available uniformly across files. Individuals were rated as having a history of being physically and/or sexually abused if the preponderance of the evidence (e.g., self-reports, mental health professionals' reports) suggested that these experiences were present in one form or another in the adolescent's past. In this fashion, 13 of the 18 adolescents were determined, in all likelihood, to have a history of physical abuse (7 young women, 6 young men), and 14 of the 18 adolescents were determined, in all likelihood, to have a history of sexual abuse (9 young women, 5 young men).

RESULTS

Fisher's exact probability tests were performed post-hoc to the data collection to determine the significance of the findings. Given the sample size of 18, and the small percentage prevalence for physical and sexual abuse calculated earlier for the year 1996, expected values of 1 were used. That is, the authors expected that one person would have a history of physical abuse, and one person would have a history of sexual abuse. Table 1 portrays the observed versus expected frequencies for physical and sexual abuse, respectively. These comparisons, as well as the numerical differences between those with a history of physical or sexual abuse and those without such a history noted, were significant at $p < .001$. That is, both physical and sexual abuse appeared in dramatically greater frequencies in this clinical sample than what would be expected given the statistics for the population at large. Qualitatively, examples of physical abuse described included being hit and/or kicked and having hair pulled, while examples of sexual abuse reported included fondling and/or rape. In some cases the reports reviewed did not describe the exact nature and extent of the abuse, suggesting rather that abuse of some type (e.g., physical, sexual) was thought or reported to have occurred.

DISCUSSION

Although this study yielded useful information concerning the prevalence of physical and sexual abuse among adolescents diagnosed with Conduct Disorder, the results must be interpreted with caution. The investigation included a small sample size, and there were inconsistencies noted in the sources from which the data was drawn (e.g., disparities in psychological and psychiatric reports, professional reports and patient reports). Also, it is unknown as to how honest the reports of the patients were likely to be, especially in light of the unavailability of disconfirming evidence

that was often the case when data was collected. Further, with the comorbidity of Conduct Disorder with other mental disorders (e.g., depression, ADHD, psychoactive substance abuse), it is nearly impossible to parcel out the relationship between histories of physical and/or sexual abuse and Conduct Disorder in isolation. However, it does seem clear that physical and/or sexual abuse histories are strongly linked to the diagnosis of Conduct Disorder in adolescents.

As far as future research in this area is concerned, it would be of immense value to increase the size of the sample so stronger conclusions about the association of physical and sexual abuse and Conduct Disorder might be advanced. Further studies should attempt to stringently define what is considered physical abuse and what is considered sexual abuse (although this will be defined by the type of information available to the researcher). The relationship between the severity of the Conduct Disorder and the intensity of a youth's abuse history should also be delineated. In this fashion, if the knowledge base is extended to the extent that children and adolescents at-risk for the development of conduct-disordered behaviors are identified with greater efficiency, the chances of an implemented treatment achieving a measure of success is increased dramatically.

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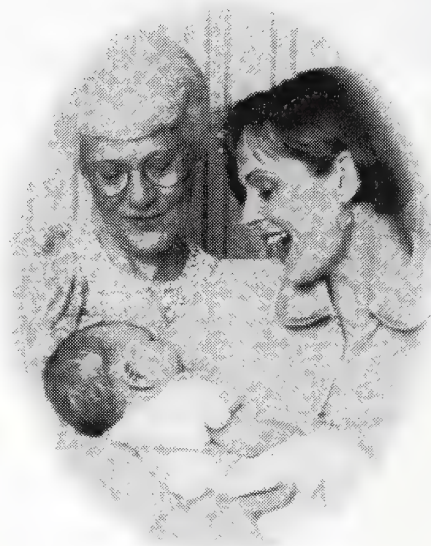
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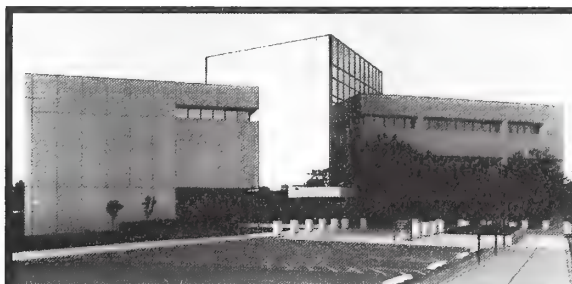
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CME CONFERENCES

Upcoming Meeting: **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced; Info: Sharon Sulzbach, 347-7145.

JANUARY 2000

- Jan 15 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jan 18 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jan 18 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.
- Jan 18 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Jan 19 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jan 19 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Jan 19 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Jan 20 **Cancer Conference** - 12:00 noon; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Jan 20 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jan 20 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Jan 20 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Jan 21 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Jan 21 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Jan 22 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jan 24 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Jan 25 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jan 25 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Jan 26 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jan 26 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Jan 27 **Cancer Conference** - 12:00 noon; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Jan 27 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jan 27 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Jan 27 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Jan 27 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Speaker: Bonnie Bunch MD; Info: Larry Wellman - 333-7178.
- Jan 28 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jan 28 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Jan 29 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

FEBRUARY 2000

- Feb 1 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Feb 1 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Feb 2 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Feb 2 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Feb 2 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Feb 2 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Feb 2 **Spine Grand Rounds** - 12:00 PM; Auditorium, Avera McKennan Hospital, third floor; Speaker: Matthew McKenzie MD; Topic: Spinal Sterosis; Info: Mary Sand, 339-6832.

Feb 3 **Cancer Conference** – 12:00 noon; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

Feb 3 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

Feb 3 **Grand Rounds** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.

Feb 4 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.

Feb 4 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

Feb 4 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.

Feb 5 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Feb 8 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.

Feb 8 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

Feb 8 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

Feb 8 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

Feb 9 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

Feb 9 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.

Feb 9 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.

Feb 10 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

Feb 10 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.

Feb 10 **Cancer Conference** – 12:00 noon; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

Feb 11 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.

Feb 11 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

Feb 12 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Feb 14 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.

Feb 14 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.

Feb 15 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

Feb 15 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.

Feb 15 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

Feb 16 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

Feb 16 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.

Feb 16 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.

Feb 17 **Cancer Conference** – 12:00 noon; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

Feb 17 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

Feb 17 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.

Feb 17 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.

Feb 18 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

Feb 18 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.

Feb 19 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Feb 22 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

Feb 22 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

Feb 23 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

Feb 23 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.

Feb 24 **Cancer Conference** – 12:00 noon; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

Feb 24 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

Feb 24 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.

Feb 24 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.

Feb 24 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.

Feb 25 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.

Feb 25 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

Feb 26 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Feb 28 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.

- Feb 29 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
 Feb 29 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

MISCELLANEOUS

JANUARY 2000

- Jan 28-30 **The 19th Annual Perspectives on New Diagnostic and Therapeutic Techniques in Clinical Cardiology**, Lake Buena Vista, FL. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.
 Jan 31-Feb 2 **The 10th Annual Echo Hawaii 2000**, Kohala Coast, Big Island, Hawaii. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.

FEBRUARY 2000

- Feb 4-5 **The Management of Typical Cases in Cardiology Based Upon the Results of Controlled Clinical Trials**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, Heart House Learning Ctr, 9111 Old Georgetown Rd, Bethesda, MD 20897-1407. Phone: 800-253-4636 ext 652. Fax: 301-897-9745.
 Feb 6-8 **Stress Echocardiography: An Interactive Interpretation Computer-Based Workshop**, Fort Lauderdale, FL. AMA Category 1 credit avail. American College of Cardiology, Heart House Learning Ctr, 9111 Old Georgetown Rd, Bethesda, MD 20897-1407. Phone: 800-253-4636 ext 652. Fax: 301-897-9745.
 Feb 7-11 **The 15th Annual Cardiovascular Conference at Hawaii**, Kohala Coast, Big Island, Hawaii. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.
 Feb 16-19 **Cardiovascular Conference at Snowbird**, Snowbird, UT. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.
 Feb 19 **Second Annual Update in the Management of Hypertension**, EPN Ed Ctr, Washington Univ Med Ctr, St. Louis, MO. Fee: \$55. 3.5 hrs AMA Category 1 credit. Washington Univ CME-WUSM, Campus Bx 8063, 660 S Euclid Ave, St. Louis, MO 63110. Phone: 314-362-6891. Fax: 314-362-1087. Email: CME@msnotes.wustl.edu.
 Feb 24-26 **Eighth Annual Refresher Course & Update in General Surgery**, The Ritz-Carlton Hotel, St. Louis, MO. Fee: \$400. 18 hrs AMA Category 1 credit. Washington Univ CME-WUSM, Campus Bx 8063, 660 S Euclid Ave, St. Louis, MO 63110. Phone: 314-362-6891. Fax: 314-362-1087. Email: CME@msnotes.wustl.edu.

MARCH 2000

- Mar 9-10 **Family Medicine Today**, Holiday Inn, St. Paul East, St. Paul, MN. Fee: \$275. 14.5 hrs AMA Category 1 credit. Registrar, Continuing Ed, Regions Hospital, 640 Jackson St, St. Paul, MN 55101-2502. Phone: 651-221-3992. Fax: 651-292-4773.
 Mar 11 **Strategies for Success**, Anaheim, CA. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.
 Mar 11 **Professional Development: Enhancing Effectiveness and Managing Change**, Anaheim, CA. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.
 Mar 26-30 **The 16th Annual Cardiovascular Conference at Lake Louise**, Lake Louise, Alberta, Canada. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.



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- Kevin Patrick, patient's father



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- Darryl Erlandson, patient's father

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About the Cover

This stunning view of the South Dakota Badlands at sunrise was taken by a former South Dakota physician, Dr. Younes Bakri. Dr. Bakri now makes his home in San Marcos, Texas.

President's Page



**K. Gene Koob, MD, President
South Dakota State Medical Association**

February 14th is almost here. Did you get your sweetheart a gift yet? Hopefully not chocolate (it has all sorts of bad stuff in it and causes headaches). Roses are pretty, but right now the price is generally sky high. I have a great and original idea for you! A joint membership in the South Dakota Medical Political Action Committee! It is thoughtful, unusual and will open up the opportunity to speak with our political representatives in both Washington, D.C., and Pierre! There is a method behind this silliness. I'm writing this in a motel room in Pierre. The 2000 Legislative session opened yesterday with the Governor's annual address. There are always several bills of interest to the SDSMA and this year is no different. We need the opportunity to express our views and a previous campaign donation helps to open the doors to us. These funds don't buy votes, but they do give us the ears of elected officials. We need that on an ongoing basis, as there will always be bills driven by others that aren't in the best interests of either our patients or ourselves. Please donate to your PAC-its your future!

Yesterday I served as The Doctor of the Day. This is a volunteer position provided as a service by the SDSMA to our legislators. I heartily recommend it to all of you. It is educational, fun, and does provide a service for the folks on capitol hill. You get a chance to observe the inner workings of our state government in action. Also you can participate in it (although this is not a lobbying position and shouldn't be used as such). You sign up at your district meetings in the fall or directly with the SDSMA office.

Finally, economic credentialing hasn't gone away. We are all getting a little tired of hearing about this, but the future of medicine is at stake. As you know, I strongly believe that physicians should control the directions of medical care, and that includes the right to practice medicine according to our skills and qualifications. We have had several discussions with the SDAHO. Hopefully, these will come to fruition by the time this article is printed. Don't let up the pressure on your hospital boards. In order to do their jobs effectively they need our input on a frequent basis. It is important that this input be direct and not filtered through the hospital administrative staff.

Start now to plan on attending the annual meeting in June. Learn something new, express your opinion and have a great time in the beautiful Black Hills of South Dakota.



**Ronda Stensland, President
South Dakota State Medical Association Alliance**

Volunteering is one of the most productive and positive energies ever created in our society. A 1995 Gallup survey reported that 48.8% of households engaged in some kind of volunteer activity. The survey also revealed that the average volunteer contributed 4.2 hours per week. If everyone in the United States stopped volunteering, the cost of getting the same amount of work done would be at least **\$201.5 billion per year!**

If you are a seasoned volunteer, you understand the important role that you play in not-for-profit organizations. You have felt the joy of volunteering and have seen the direct effect that you have made in helping others.

If I pose this question to each of you: why do you volunteer your time? I'm sure 100% of you would answer by stating: "I believe in the cause and I want to help those who are less fortunate." Nationally, this is the number one reason why people volunteer their time.

It's that warm fuzzy feeling we all get knowing that we have impacted someone's life in a positive way. But there are other benefits of volunteering that are often overlooked.

Think about your last volunteer experience. Whether it was attending a board or committee meeting, delivering meals to shut-ins, painting a house, etc. What was your *true return value* from the experience? Did you - make new contacts; develop a strong sense of completing a personal mission; gain board and committee experience; learn how to develop a strategic or financial plan; have a better understanding of social patterns; become more concerned about the future of your community; increase your skills to negotiate, compromise, and be a team player; or improve your written and verbal communication skills?

Volunteering is a wonderful process. The *true return value* that you receive can be immense. Being a volunteer should not be exclusively a middle aged adult activity. Instead, it should begin early in life. While helping others benefits the community, it should also be viewed by volunteers as a way of improving themselves and can be used as an important tool by young people who want to gain skills; by young adults who want to establish themselves in the community and in their professions; by adults who want to maintain skills and give something back to society; and by senior citizens who want to contribute to society and feel that they are still vital and needed.

So, the next time you are approached to spend some time helping others, I hope you will say "yes" and encourage family members to participate in a community project. Each of you will personally receive as much, or more, than what you give.

*Referenced from *The Universal Benefits of Volunteering*.
Walter P. Pidgeon, Jr.

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Editorial

Sugi's Head



Kazuaki Sugi's heads are large. The one on our porch has a diameter of 64" or so. Sugi fashioned it out of clay and fired it in the wood-fueled kiln at St. John's University several years ago. It is glazed in earthen tones that seem to wax and wane depending on the ambient light. Mostly copper streaks amid shades of black seem to dominate. The ears are perfectly proportioned and lend a gentleness to the figure.

But it's the face I find most riveting as I have pondered the sculpture. The visage has intense expression, but virtually no identifiable features. There are studied indentations in the clay, but no defined nose, eyes, or mouth. It doesn't need them. The figure seems to know much more than it is willing to reveal. At dusk, undulations in the clay become solemn eyes pulling me inward to unspoken mysteries. By daylight, its expression suggests inscrutable reserve.

As I reflect on Sugi's sculpture, I find myself pondering the connections between the world of art and the intimacies of people's lives. I recall a 1998 visit to the Van Gogh exhibition at the National Gallery of Art in Washington, D.C. Even the long wait in line to see Van Gogh's paintings was engrossing. While our party, and many others, had reserved tickets weeks in advance, we still endured taxing delays before reaching the paintings. But the longest queues formed for "same-day" passes, and I was puzzled to observe that many gray, disheveled men were patiently standing in this latter line. Their blank expressions were, in retrospect, eerily like Sugi's sculpture. At first I thought that these seemingly dissolute individuals were merely responding to the universal appeal of viewing fine art. Only later did I realize that they were waiting to pick up free tickets in order to sell them to other people who were affluent enough to disdain standing in line themselves.

As the foregoing experience suggests, the very milieu of an art exhibition can inform about human endeavor. But it is, of course, the artist and the created work itself that more predictably yield insights. In Van Gogh's life, we can readily envision how personal struggle and art can be hauntingly interwoven. While confined to his room in an asylum, Van Gogh continued to paint, creating such works as the serene "Wheatfield with a Reaper." Even while being ravaged by depression, his artistic talent was able to prevail as he gazed through the barred window of the institution.

A regional artist, Sheila Agee, has used her art to more explicitly study the paradox and tragedy that can fill our lives. Her 1998 exhibition entitled "Heaven on Earth, Hell on Earth" dramatically contrasted the serenity of nature with the turmoil, suffering, and evil that characterizes the lives of many people. The Agee exhibition was effectively analyzed in Dr. Ann Pederson's recent book, *Where in the World is God?*¹ Pederson wrote of the "dissonant juxtaposition" portrayed in the exhibition and expressed feelings of "dynamism, instability and ambiguity" while pondering Agee's visual representations of complex and often fractured lives.

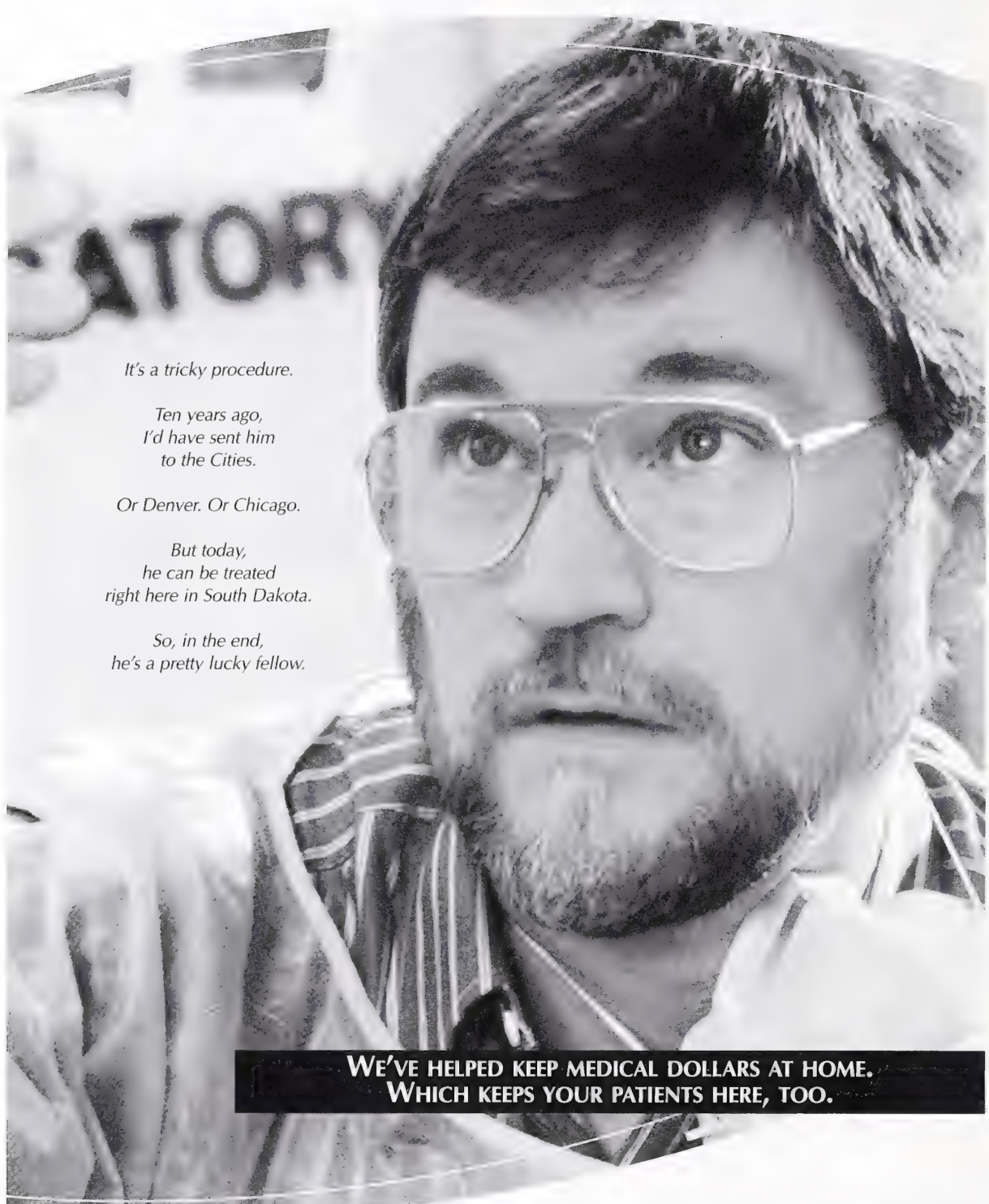
While Agee's exhibition was almost brutally explicit, certainly much of art and human endeavor is shrouded in obscurity. Again, I envision Sugi's head and think of the times that I have peered at patients trying to discern what hidden mysteries were causing their symptoms. Sometimes I have yearned to know just the simple truth of whether the patient's symptoms were purely organic or somatoform in nature. Despite my anxiety and focused intent, there have been instances when my riveted gaze has been met with the same type of veiled reserve that Sugi's sculpture suggests. It is almost as if my intense queries are reflected back to me without penetrating the subject.

On first glance, Sugi's sculpture may seem too abstract to bear witness to human experience. However, an attentive focus on the serene clay visage seems to yield hidden meanings proportionate to the observer's efforts. Perhaps such attention to Sugi's work serves as a paradigm for the effort needed to optimally appreciate another human's burden. And as a companion issue, it is logical to move to additional queries: how do we see ourselves? Who are we and where are we going? The pathos evident in art and in life offers us possibilities to expand our perspectives. The success of our endeavors often depends on the effort we expend to define truth in the shadows of otherwise ordinary sunlight.

Jerome W. Freeman
Editor

REFERENCES

1. Pederson, Ann. *Where in the World is God*. Chalice Press, St. Louis, MO; 1998.



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Correction

Correction to Volume 52, Number 7, July, 1999 - SOUTH DAKOTA JOURNAL OF MEDICINE. The article, *Reduction in Methicillin-Resistant Staphylococcus Aureus Infection Rate in a Nursing Home by Aggressive Containment Strategies*, by Mary Jo Jaqua-Stewart, MSPH, PhD; Jean Tjaden, RN; Donald W. Humphreys, MD; Priscilla Bade, MD; Patricia M. Tille, BD; K.G. Peterson, MD; A.G. Salem, MD. The correct "Figure 6" is shown below and should replace the "Figure 6" on page 246 of the aforementioned issue.

Figure 6
ECU MRSA Plasmid Patterns

BP	Lambda	PATTERNS		
		1	2	3
23,130				
9,416				
6,557				
4,361				
2,322				
2,027				
564				
125				

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(Federal regulations require this notice.)

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Pharmacotherapy For Smoking Cessation

James R. Clem, PharmD; Sioux Falls, SD

Smoking continues to be a leading contributor to preventable deaths in the United States. Up until the past several years, the rate of new smokers had been declining. Recently, however, the rate of new smokers has been rising due to an increase in smoking among teenagers, women, and minorities.¹ Some recent numbers show South Dakota among the top five states in the U.S. in prevalence rate for current smokers.² A majority of people who smoke would like to quit. Unfortunately, due to the complexities of smoking behavior, most of those who want to quit smoking are unsuccessful in their attempt to quit. Health professionals have the opportunity to provide patients with information and assistance that can increase quit rates. In fact, contacts with multiple healthcare professionals have been shown to significantly increase the successful smoking cessation rate.³

It is vitally important for patients to understand that there are three major aspects of smoking behavior: addiction, habit, and psychological dependence. It can probably be best described as a three-leg table, in that all three elements need to be dealt with to some degree for successful smoking cessation. The pharmacotherapy of smoking cessation only deals with one aspect of smoking behavior, nicotine addiction. Habit and psychological aspects also need to be addressed when assisting patients.

There are two major products available to assist patients in smoking cessation, nicotine replacement products, and bupropion (Zyban®). The major benefit from medications used in smoking cessation is to prevent the occurrence of nicotine withdrawal symptoms (anxiety, impatience, irritability, and restlessness). Nicotine replacement prevents nicotine withdrawal symptoms, thus giving individuals time to change their habits and behaviors related to smoking as well as their psychological dependency to smoking. An analogy would be someone trying to learn to play the piano while they felt anxious, impatient, irritable, and restless. The end result usually would not be very successful.

Nicotine replacement products are available in a variety of dosage forms: gum, patch, nasal spray, and oral inhaler. The selection of a nicotine replacement product for any given individual depends on their smoking history. For example, if the smoker is a truck

driver and typically smokes due to boredom of driving, then a product that requires that individual to actively deliver the nicotine (e.g., nicotine gum) will prevent nicotine withdrawal while also helping deal with boredom.

Proper use of nicotine replacement products is also very important. Nicotine gum, for example, is a very misleading term for this product. If one were to chew nicotine gum like gum, they would likely suffer from significant nicotine adverse effects (e.g., hiccups, dyspepsia, and mouth soreness). In fact, to appropriately use nicotine gum, individuals should “activate” the gum by chewing it until a peppery taste appears, then the gum should be “parked” between the cheek and gum to allow the nicotine to be delivered through the buccal membranes. Once the peppery taste disappears, it needs to be activated again by chewing until the peppery taste reemerges and then needs to be parked in a different location (between cheek and gum). This process for proper gum use should be repeated slowly and intermittently over 30 minutes. Relapse while on nicotine gum usually occurs because an inadequate number of pieces are being used on a daily basis or used for an insufficient number of weeks.

There are numerous nicotine patches available. In general, the patches are all fairly similar, with a few subtle differences. One of these is the duration the patches are to be worn. Nicotine replacement patches are usually worn for either 16 hours per day or for a full 24 hours. The 16-hour patches are designed for removal at bedtime and then a new patch is to be applied in the morning. This dosing schedule is designed to mimic a smoker’s nicotine levels when they smoke since their nicotine levels drop while sleeping. The downside to this would be having that person wake up in nicotine withdrawal, thus making it difficult for them to not smoke upon awakening. When using the 24-hour patch, it is important that patients remove the patch from the previous day and place a new patch in a different location. Skin sites for patch placement should be rotated every 7 days to avoid potential skin irritation.

The major adverse effect described for the nicotine replacement patches is skin irritation. The irritation comes from the adhesive used to attach the patch to the skin, not from the nicotine. The adhesives used in various brands of nicotine patch products are all

different. Therefore, if an individual is having trouble with skin irritation from a particular patch, trying a different patch product is reasonable. With the 24-hour patch products, vivid dreams have been described. If these vivid dreams are bothersome, then the 24-hour patch could be removed at bedtime and a new one put on in the morning.

The other two nicotine replacement products currently available are the nicotine oral inhaler and the nicotine nasal spray. These two products have been on the market for shorter time periods as compared to the patch and gum products. One potential disadvantage of the oral inhaler is that it does not help break the habit of smoking with regard to repetitive "hand to mouth" movement. This could potentially make it more difficult to eventually break the habit of smoking movements. A potential disadvantage of the nicotine nasal spray is that it can be very irritating to the nasal passages. In pre-marketing studies with the nicotine nasal spray, diluted pepper spray was used as the placebo solution. Needless to say, it can irritate the nasal passages, potentially influencing compliance.

Bupropion has been shown to improve smoking cessation rates. The exact mechanism of this benefit is not known. There are two major issues to remember when utilizing bupropion therapy for smoking cessation. First, bupropion therapy should be started one week prior to quitting. This allows the bupropion levels to achieve steady-state prior to actually stopping smoking. Second, bupropion is contraindicated in those with a seizure history, head trauma, or anyone taking other drugs that can lower the seizure threshold. Smoking cessation rates with bupropion are higher than with nicotine patches, however, combined use of bupropion and a nicotine patch has resulted in cessation rates of 35 percent.⁴

In summary, smoking continues to be a significant healthcare issue. Without question, the impact of healthcare professionals on successful smoking cessation is significant. Appropriate use of smoking cessation therapies is critical to help optimize an individual's smoking cessation effort. All three aspects of smoking behavior need to be addressed when assisting an individual with smoking cessation.

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Edited by Brian Kaatz, Pharm.D.



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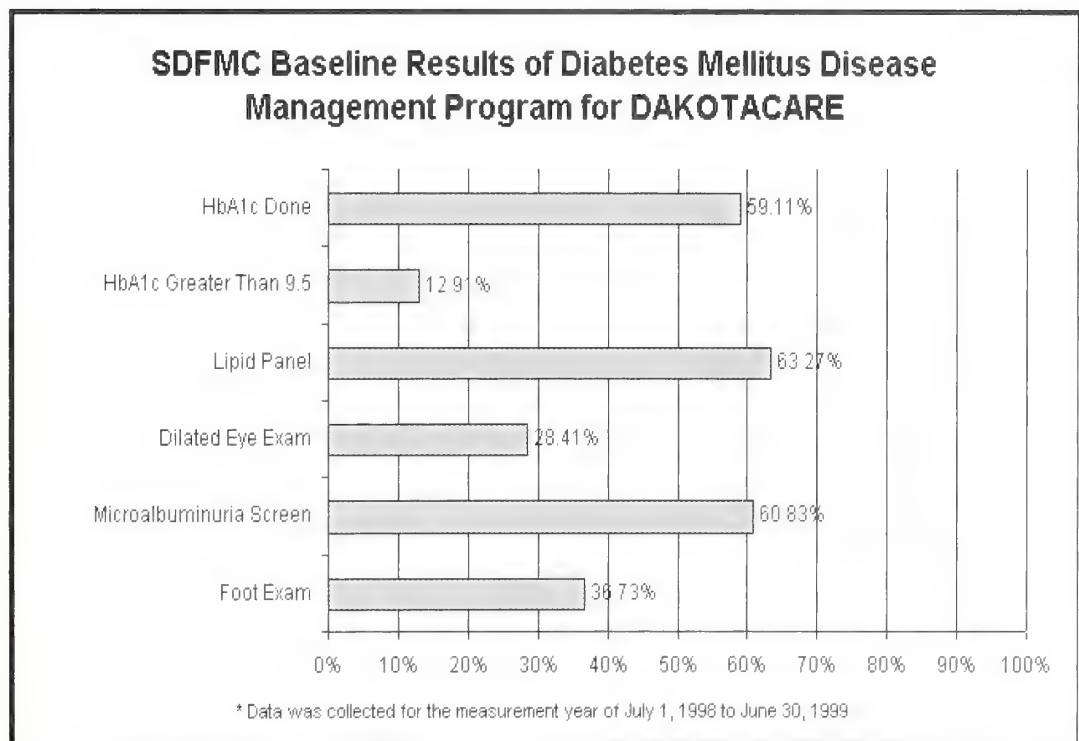
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Rapid Resolution Of Antipsychotic-Induced Tardive Dyskinesia With Olanzapine

Mujeeb Khan, MD Yankton, SD; Debra Farver, PharmD, Yankton, SD

ABSTRACT

Rapid improvement of tardive dyskinesia was identified following initiation of olanzapine in an elderly male patient formally treated with chlorpromazine.

INTRODUCTION

Tardive dyskinesia is a significant adverse effect, of varying degrees of severity, associated with the cumulative duration of use of a typical antipsychotic medication.^{1,2} Abnormal orofacial movements such as tongue protrusion (fly-catcher's tongue), facial grimacing, lip smacking, jaw movements, and excessive blinking of the eyes characterize tardive dyskinesia. Late presenting choreoathetoid type movements are associated with the upper extremities, trunk and pelvis. Ranging from mild to severe, the involuntary movements produce disabling symptoms that impair activities of daily living. To diagnose tardive dyskinesia, the criteria is that the patient must have received an antipsychotic medication for at least three months and the abnormal movement must be present and persistent for at least four weeks.³ Other diseases, such as spontaneous oral dyskinesia, tardive akathisia or dystonia, withdrawal dyskinesia, and Huntington's chorea, need to be part of the differential diagnosis.^{4,5} Also to be considered are other drugs besides the antipsychotics that can induce the abnormal movements. Reported cases have been with levodopa, amphetamines, phenytoin, estrogens, metoclopramide, and amoxapine.

The overall prevalence of typical antipsychotic-induced tardive dyskinesia is estimated to be 30% to 50% after 5 to 10 years of use.^{6,7} The mechanism for this adverse effect is unknown, but has been postulated to be dopamine receptor supersensitivity in the nigrostriatal pathway.^{1,2} Other theories concern the noradrenergic and gamma-aminobutyric acid (GABA) neurotransmitter systems. Risk factors that should be

noted with tardive dyskinesia are the use of a typical antipsychotic agent (i.e. chlorpromazine, haloperidol, etc.), dose and duration of use of the antipsychotic, older age especially in women, affective disorders, underlying organic brain impairment, and existing extrapyramidal symptoms (i.e. akathisia, dystonia, parkinsonism).^{3,8,9} The incidence in older patients and middle-aged women approaches 60%.

Tardive dyskinesia is a potentially irreversible adverse effect in which management is very difficult. Treatment options include discontinuation of the typical antipsychotic or reducing the dose by approximately 50% over 12 weeks.³ If the symptoms do not decrease or resolve, then medications such as anticholinergics, pindolol, calcium channel blockers, and clonazepam are added on a trial basis.¹⁰ Success has been limited with these treatment options. The use of novel antipsychotics such as clozapine (Clozaril), risperidone (Risperdol), olanzapine (Zyprexa), or quetiapine (Seroquel) may be recommended due to their decreased incidence of tardive dyskinesia as compared to the typical antipsychotics.^{6,7} Typically, clozapine has been the novel antipsychotic recommended to reduce the abnormal movements. Use of the other novel antipsychotics for tardive dyskinesia has been limited.

As a thienobenzodiazepine, olanzapine has substantial affinity for serotonin (5-HT_{2A}, 5-HT_{2C} and 5-HT₃), dopamine (D₂ and D₄), adrenergic alpha-1, muscarinic-1, and histamine H₁ receptors.¹¹ To determine the incidence of olanzapine-induced tardive dyskinesia, Street et al. evaluated data from three clinical studies.¹² Patients received 2.5 mg/day to 20 mg/day of olanzapine for a median duration of 237 days. In

patients with a history of dyskinetic symptoms, the incidence of olanzapine induced tardive dyskinesia was 2.5%, as compared to 2.3% in those without a history of dyskinesia. Based on this information, olanzapine has a decreased potential risk for inducing tardive dyskinesia. It has also been postulated that olanzapine may decrease pre-existing symptoms of orofacial and trunk-limb involuntary movements.¹³ Our case report evaluated the use of low dose olanzapine in an elderly man with a history of chlorpromazine-induced tardive dyskinesia.

CASE REPORT

A 67-year-old Caucasian male, with an Axis I diagnosis of bipolar disorder for 23 years along with moderate Alzheimer's type dementia, was admitted for worsening depression. The patient had been withdrawn, isolative, slept all day, and had a weight loss of 32 pounds over the last year. His affect and mood were depressed with mild anxiety and dysphoria without suicidal ideations. The Mini-mental status of cognitive assessment was 17/30. The patient had been hospitalized five times in the past for both depressive and manic episodes. Axis III diagnoses included hypertension, hypothyroidism, coronary artery disease, polyuria secondary to lithium, and tardive dyskinesia secondary to chlorpromazine. His medications, upon admission, included: lithium carbonate, valproic acid, clonazepam, levothyroxine, enalapril, amlodipine, and nitroglycerin. On physical exam, moderate to severe orofacial symptoms of tardive dyskinesia, including jaw movements, lip and perioral area smacking, and blepharospasms, were present. His Abnormal Involuntary Movement Scale (AIMS) score was 13.

Within 72 hours of initiating olanzapine 2.5mg/day, the tardive dyskinesia had decreased to minimal symptoms with an AIMS score of 2. After three weeks of therapy, the patient's depression (associated with bipolar disorder) had improved and he was discharged with olanzapine 2.5mg/day due to the improvement in the tardive dyskinesia symptoms.

DISCUSSION

Clozapine was the first atypical antipsychotic reported to have a decreased risk for tardive dyskinesia and extrapyramidal adverse effects.¹⁴ Clozapine's complicated mechanism of action with serotonin, dopamine, histamine, alpha and muscarinic receptors, and lower affinity for dopamine (D₂) receptor may explain the decreased incidence of these adverse effects. With the decreased risk of tardive dyskinesia, clozapine use in preexisting antipsychotic-induced tardive dyskinesia was questioned. In 1991, Lieberman et al.

studied the effects of clozapine in 30 individuals who had antipsychotic-induced tardive dyskinesia.¹⁵ The conclusion of the three-year study was that clozapine was beneficial in improving the symptoms in approximately 43% of the patients. More recently, Spivak and colleagues evaluated 20 individuals receiving clozapine for 18 weeks.¹⁶ Improvement rates were 74% with tardive dyskinesia based on the Abnormal Involuntary Movement Scale (AIMS) and Simpson-Angus Rating Scale for Extrapyramidal Side Effects.

Limited case reports have been published regarding the use of olanzapine for improving antipsychotic induced tardive dyskinesia.^{17,18} O'Brien and Barber described a case of a 69-year-old male with paranoid schizophrenia presenting with delusions and auditory hallucinations.¹⁷ The patient had previously been treated with trifluoperazine (10mg/day for three years), sulpiride (200mg/day for one year) and risperidone (2mg/day for three months). Symptoms of marked tardive dyskinesia included orofacial grimacing and tongue movements. When olanzapine 5mg/day was initiated, the delusions and auditory hallucinations improved markedly. The orofacial grimacing was noticeably improved after three weeks of olanzapine. The family reported that they did not observe any symptoms of the tardive dyskinesia at six months.

Littrell and colleagues summarized information from four patients with a history of schizophrenia (ranging from 13 to 25 years in duration), who were experiencing significant antipsychotic -induced tardive dyskinesia.¹⁸ All of the patients had a significant reduction in their AIMS score when re-evaluated after receiving two months of olanzapine (initial dose of 10mg/day, followed by 20mg/day). The effect of olanzapine was maintained as evaluated by subsequent AIMS scores after six months of therapy.

Our case report differs from those previously published, based on the rapid reduction of the tardive dyskinesia symptoms within 72 hours of initiation with low dose olanzapine. The previous reports noted significant reduction in tardive dyskinesia symptoms after weeks or several months of therapy. A dose of only 2.5mg/day of olanzapine was used in this patient's case whereas the other cases used doses of 5mg/day to 20mg/day. It would appear that olanzapine has a potential role in minimizing the symptoms of typical antipsychotic-induced tardive dyskinesia. Further research is needed to determine effective doses of olanzapine, to assess its effectiveness over an extended time, and to compare the atypical antipsychotics to

determine if one agent provides superior results in minimizing the symptoms of typical antipsychotic-induced tardive dyskinesia.

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Letter To The Editor

Dear Editor:

I am writing to commend Paul Kellerman, MD, for his forthright article on child abuse reporting that was published in the November 1999, *South Dakota Journal of Medicine*. In his article, Dr. Kellerman calls for educational requirements on reporting of child abuse.

For the past 12 years, the first year Introduction to Clinical Medicine course taught at the University of South Dakota School of Medicine has begun its human development curriculum with a session on the long term effects of childhood maltreatment. During this session, background information regarding the dynamics associated with child maltreatment is presented. Following this introductory material, a panel of adult men and women who have had the unfortunate experience of being abused as children present descriptions of how this has affected their lives. This has typically been a powerful clinical exposure for the class and has provided a background for considering the importance of prevention efforts that identify families who need assistance. During this class the legal requirements for reporting suspected child abuse and neglect are presented to the students.

Many years will pass before first year students will be practicing physicians. I, however, would like to believe that having this material presented to them so early in their education instills a deep respect for how development may be seriously affected by early maltreatment. It also emphasizes the important legal role they must play in reporting suspected abuse and neglect to appropriate authorities in their communities. This message must continue to be reinforced throughout their training and future practices.

I thank Dr. Kellerman for his willingness to describe, from his personal perspective, the importance of awareness of what these legal mandates require.

Ann L. Wilson, PhD
Professor, Department of Pediatrics
USD School of Medicine

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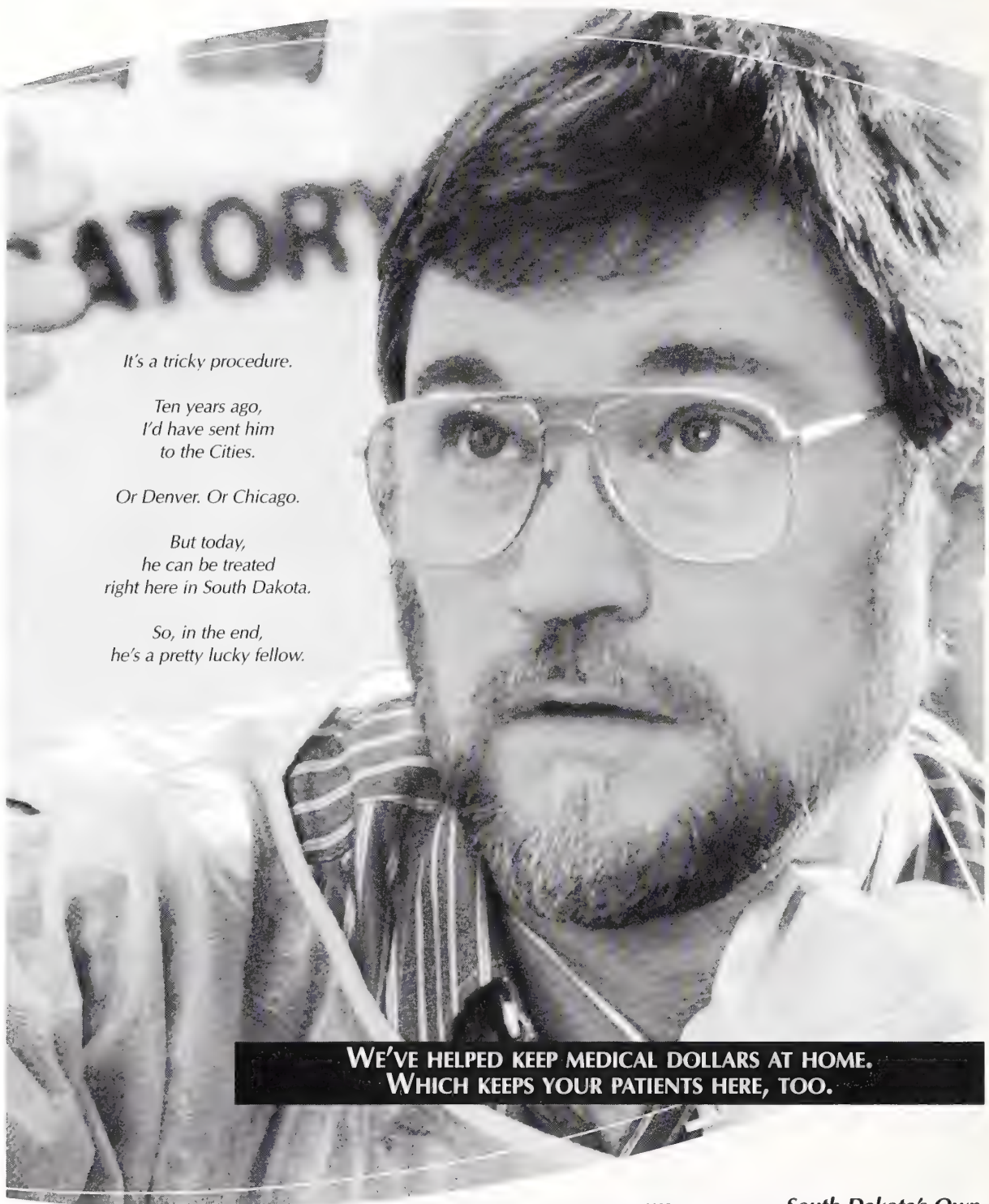
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Correction

Correction to Volume 52, Number 7, July, 1999 - SOUTH DAKOTA JOURNAL OF MEDICINE. The article, *Reduction in Methicillin-Resistant Staphylococcus Aureus Infection Rate in a Nursing Home by Aggressive Containment Strategies*, by Mary Jo Jaqua-Stewart, MSPH, PhD; Jean Tjaden, RN; Donald W. Humphreys, MD; Priscilla Bade, MD; Patricia M. Tille, BD; K.G. Peterson, MD; A.G. Salem, MD. The correct "Figure 6" is shown below and should replace the "Figure 6" on page 246 of the aforementioned issue.

Figure 6
ECU MRSA Plasmid Patterns

BP	Lambda	PATTERNS		
		1	2	3
23,130	=====	=====	=====	=====
9,416	=====	=====	=====	=====
6,557	=====	=====	=====	=====
4,361	=====	=====	=====	=====
2,322	=====	=====	=====	=====
2,027	=====	=====	=====	=====
564	=====	=====	=====	=====
125	=====	=====	=====	=====

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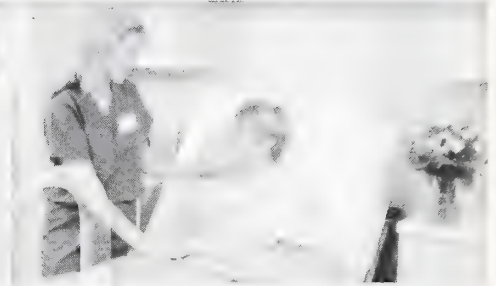
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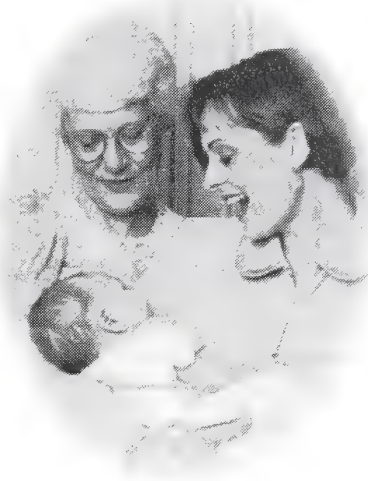
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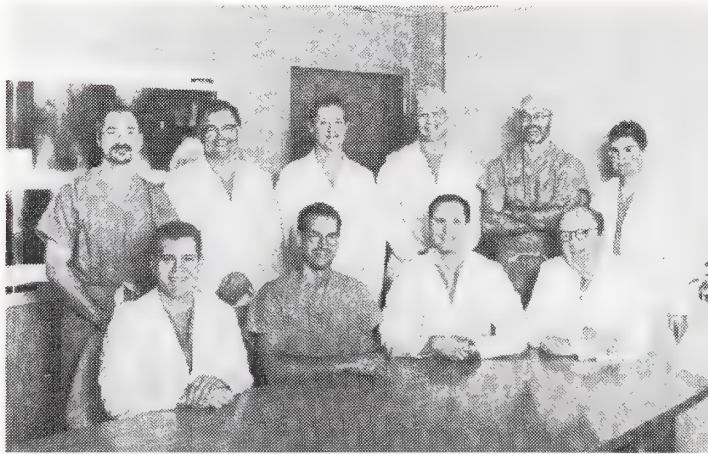
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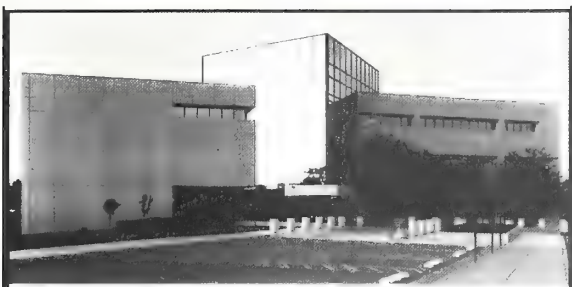
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FEBRUARY 2000

- Feb 15 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Feb 15 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.
- Feb 15 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Feb 16 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Feb 16 **USDSM Audioconference** – 2:30 pm (CST)/1:30 pm (MST); Speaker: Howard S. Hochster MD; Topic: Clinical Implications for Patient Care – Topoisomerase/Inhibition; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Feb 16 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Feb 16 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Feb 17 **USDSM Audioconference** – 1:30 pm (CST)/12:30 pm (MST); Speaker: Howard S. Hochster MD; Topic: Clinical Implications for Patient Care – Topoisomerase/Inhibition; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Feb 17 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Feb 17 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Feb 17 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Feb 17 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Feb 18 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Feb 18 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Feb 19 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Feb 22 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Feb 22 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Feb 23 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Feb 23 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Feb 24 **USDSM Audioconference** – 12:30 pm (CST)/11:30 am (MST); Speaker: Howard S. Hochster MD; Topic: Clinical Implications for Patient Care – Topoisomerase/Inhibition; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Feb 24 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Feb 24 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Feb 24 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Feb 24 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley; Speaker: Craig Cooksley, DDS; Topic: to be announced; Info: Larry Wellman - 333-7178.
- Feb 24 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Feb 25 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Feb 25 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Feb 26 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Feb 28 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.

- Feb 29 **USDSM Audioconference** – 11:30 am (CST)/10:30 am (MST); Speaker: Howard S. Hochster MD; Topic: Clinical Implications for Patient Care – Topoisomerase/Inhibition; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Feb 29 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Feb 29 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

MARCH 2000

- Mar 1 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 1 **CPCWednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Mar 1 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 1 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Mar 1 **Spine Grand Rounds** - 12:00 PM; Auditorium, Avera McKennan Hospital, third floor; Speaker: Walter O. Carlson; Topic: Scoliosis; Info: Mary Sand, 339-6832.
- Mar 2 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 2 **Grand Rounds** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Mar 2 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 3 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Mar 3 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Mar 3 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Mar 4 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Mar 7 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Mar 7 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Mar 8 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 8 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 8 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Mar 8 **Dermatopathology Conference** - 7:30 AM; SVH Pathology Conference Room 1513; Info: 333-1730.
- Mar 9 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 9 **USDSM Audioconference** – 11:30 am (CST)/10:30 am (MST); Speaker: Charles S. Fuchs MD; Topic: Topoisomerase/Inhibition – Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 9 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Speaker: Anchana Chatterjee MD, PhD; Topic: Pediatric Infectious Diseases-Emerging Therapies in the New Millennium; Info: Dr. Larry Wellman - 333-7178.
- Mar 9 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 10 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Mar 10 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Mar 11 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Mar 13 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Mar 13 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Mar 14 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext 7232.
- Mar 14 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Mar 14 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Mar 14 **Breast Cancer Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital BHI - 333-5244.
- Mar 15 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 15 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.

- Mar 15 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 16 **USDSM Audioconference** – 12:30 am (CST)/11:30 am (MST); Speaker: Charles S. Fuchs MD; Topic: Topoisomerase/Inhibition – Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 16 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 16 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Mar 16 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Mar 16 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 17 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Mar 17 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Mar 18 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Mar 21 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Mar 21 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.
- Mar 21 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Mar 22 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 22 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 23 **USDSM Audioconference** – 1:30 pm (CST)/12:30 pm (MST); Speaker: Charles S. Fuchs MD; Topic: Topoisomerase/Inhibition – Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 23 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 23 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Mar 23 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Mar 23 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Carlson Lecture in Pediatric Oncology; Info: Larry Wellman - 333-7178.
- Mar 23 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 24 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Mar 24 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Mar 25 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Mar 27 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Mar 28 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Mar 28 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Mar 29 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 29 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 30 **USDSM Audioconference** – 2:30 pm (CST)/1:30 pm (MST); Speaker: Charles S. Fuchs MD; Topic: Topoisomerase/Inhibition – Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 30 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 30 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 31 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.

MISCELLANEOUS

FEBRUARY 2000

- Feb 17-19 **Advances in Clinical Adult Neurology**, Spearfish Canyon Resort, Spearfish, SD. K Alan Kelts, MD, PhD, 2929 5th St, Ste 240, Rapid City, SD 57701. Phone: 605/341-3770.
- Feb 19 **Second Annual Update in the Management of Hypertension**, EPN Ed Ctr, Washington Univ Med Ctr, St. Louis, MO. Fee: \$55. 3.5 hrs AMA Category 1 credit. Washington Univ CME-WUSM, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

Feb 24-26 **Eighth Annual Refresher Course & Update in General Surgery**, The Ritz-Carlton Hotel, St. Louis, MO. Fee: \$400. 18 hrs AMA Category 1 credit. Washington Univ CME-WUSM, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

MARCH 2000

- Mar 9-10 **Family Medicine Today**, Holiday Inn, St. Paul East, St. Paul, MN. Fee \$275. 14.5 hrs AMA Category 1 credit. Registrar, Continuing Ed, Regions Hospital, 640 Jackson St, St. Paul, MN 55101-2502. Phone: 651/221/3992. Fax: 651/292-4773.
- Mar 11 **Strategies for Success**, Anaheim, CA. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636 ext 695. Fax: 301/897-9745.
- Mar 11 **Professional Development: Enhancing Effectiveness and Managing Change**, Anaheim, CA. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636 ext 695. Fax: 301/897-9745.
- Mar 14-17 **12th National HIV/AIDS Update Conference**, Bill Graham Civic Auditorium, San Francisco, CA. AMA Category 1 credit avail. Conference Secretariat: Felicissimo & Associates, Inc, 205 Vigor Ave, W, Ste 201, Montreal, QC Canada H2Z 1G2. Phone: 514/874-1998. Fax: 514/874-1580. Email: nauc@total.net.
- Mar 19-21 **Clinical Updates in Correctional HealthCare**, New Orleans, LA. AMA Category 1 credit avail. National Commission on Correctional HealthCare, 1300 W Belmont Ave, Chicago, IL 60657-3200. Phone: 773/880-1460. Fax: 773/880-2424. Email: ncchc@ncchc.org.
- Mar 26-30 **The 16th Annual Cardiovascular Conference at Lake Louise**, Lake Louise, Alberta, Canada. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636 ext 695. Fax: 301/897-9745.
- Mar 27-29 **Osteoporosis Prevention, Diagnosis, and Therapy**, Natcher Conference Ctr, National Inst of Hlth, Bethesda, MD. AMA Category 1 credit avail. Prospect Associates, 10720 Columbia Pike, Silver Spring, MD 20901. Phone: 301/592-8600. Fax: 301/593-5791. Email: osteoporosis@prospectassoc.com.
- Mar 27-31 **Selected Topics in Internal Medicine**, The Westin Resort, Hilton Head Island, South Carolina. Fee: \$675. 24.5 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 507/284-2509. Fax: 507/284-0532.
- Mar 29-Apr 2 **2000 International Conference on Physician Health**, Seabrook Island, SC. AMA Category 1 credit avail. American Medical Association, Science and Public Hlth Advocacy Pgrms, 515 N State St, Chicago, IL 60610. Phone: 312/464-5066. Fax: 312/464-5841.

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Send your CME Conference information to:

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In 1994, North Central Heart Institute established the North Central Heart Foundation in order to financially assist students preparing for a career in medicine. Awarded to students annually, scholarships are granted based upon a student's academic excellence, financial need and their desire to practice rural primary care.

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“

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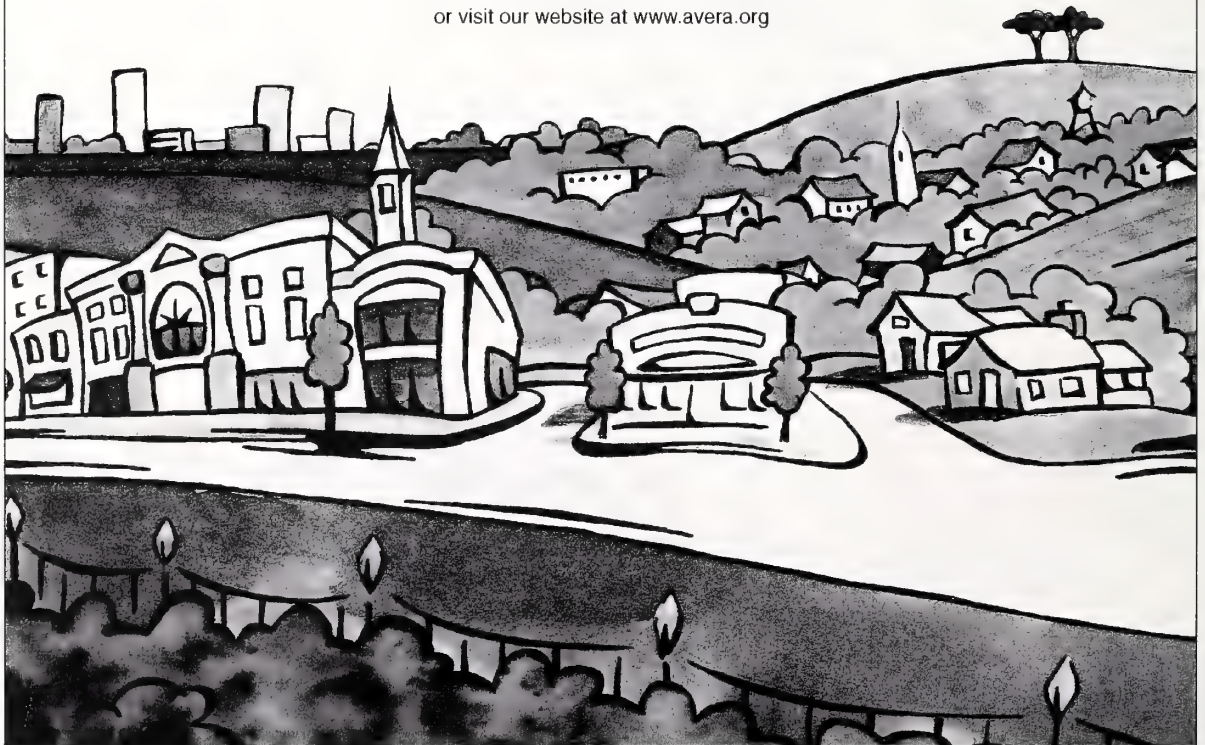
*"WE MUST CARE FOR PEOPLE IN SUCH A WAY,
that, whether or not we can physically cure their illness,
they find STRENGTH and COMFORT in knowing GOD'S ABIDING LOVE for them,
despite their experience of chaos."*

*Excerpt from a pastoral letter on healthcare
by Joseph Cardinal Bernardin, former Archbishop of Chicago*

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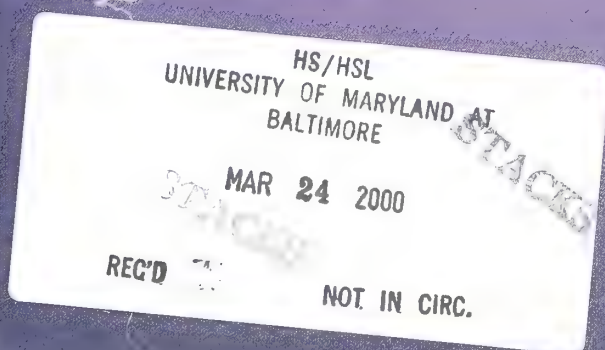


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Trust Your Heart to the Leader



Kathleen R. Kearney, MD

It is with great pleasure that we welcome Kathleen R. Kearney, MD to Heart Partners. Dr. Kathleen Kearney received her medical degree from the Medical College of Georgia in 1990. She completed her residency in Internal Medicine at the University of Kentucky Medical Center, completed a fellowship in Cardiology and Clinical Scholar Year in Echocardiography at the University of Kentucky. Dr. Kearney is board-certified with the American Board of Internal Medicine and American Board of Cardiology.

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SCIENTIFIC ARTICLES

USD School of Medicine

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Asish Mukherjee, MD*

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About the Cover

Sioux Falls photographer Greg Latza took this dramatic photo of lightning flashing above St. Joseph's Cathedral in Sioux Falls.

President's Page



K. Gene Koob, MD, President
South Dakota State Medical Association

Ok, I'm going to give you one last chance. I know that a lot of you probably didn't take my advice and ended up getting your sweetheart roses, chocolates, or some other such nonsense. The really thoughtful sent in their check to South Dakota Med PAC. You still have time, so don't delay. Once again the importance of this was driven home to a group of your colleagues. A hard working group of young physicians spent Valentine's Day in Pierre doing much needed lobbying work. They did an excellent job, but also had the opportunity to see the value of a PAC dollar. They don't buy votes, but we absolutely must have them for us to continue to have a credible voice that will be heard in Pierre. Also, don't forget, it is just as important to get involved. Learn who your elected officials are. It is probably even more important that they learn who you are. During the session your words will carry a lot more weight if your name and face are known.

The battles waged this year will be won or lost by the time you read this. It will give us time to start anew

for the upcoming session. We should already have a plan of action by the time we complete our June meeting. I believe that the scope of practice issues will be even more contentious and far-reaching next year than they were this year. It seems amazing to physicians that we don't even start our practices until after at least seven years of training, but some legislators are willing to allow a little more than one-half of that amount of time to be enough to allow the performance of unsupervised school athletic physicals. I also have a very hard time believing that chiropractors should be making a determination of when an athlete with a head injury should be allowed to participate in contact sports. They simply aren't educated nor trained to take that responsibility.

I know you read the SDSMA Journal, but how about JAMA, and the American Medical News? Information about the above topics will frequently be found there. As part of my job this year I read each of those as often as possible. It turned out to be well worth the investment in time. In JAMA the "Medical News & Perspectives" recently had two brief summaries on Parkinsonism that would be worth while for all physicians to check out (Sept 22/29, 1999: pps 1117-1119). The AM News is mostly political and economic, but carries pearls about professional behavior, ethics, and the future of medicine. Even a few clinical thoughts show up, such as the front-page discussion of the West Nile encephalitis outbreak (Jan 24, 2000). We are all pushed for time, but these two AMA publications deserve at least a general screening.

Keep up the hard work - but now is the time to plan for fun - make reservations for the Annual Meeting in June. See you there!

K.G. Koob, MD.



Ronda Stensland, President
South Dakota State Medical Association Alliance

While I can expound endlessly on the worthwhile endeavors of the SDSMA Alliance, praise and edification coming from the ones we care about most is so much more appreciated. I would like to share the following letter from my daughter-in-law, Angelique. Please take these words to heart, because you are the heart of this Alliance!

Dear Mother Stensland

Through the year you've told me about events and activities the Alliance has undertaken in an effort to serve the numerous outstretched arms and minds in your community. Then, in our last conversation, I learned that yours was the oldest, continuous medical alliance in the United States, celebrating your 90th year in service to others! A true achievement in a radically changing world, don't you think?

As I've watched your activities with the South Dakota State Medical Association Alliance over the passing months, I have learned, and been inspired by

the kind of work that your group performs, and believe that you and your members should be acknowledged for your past, present and future contribution.

Although we live many miles apart and our worlds are busy with different activities, through sharing Alliance achievements and goals, you've caused me to think more deeply about important societal issues and how I might impact the lives of those around me. I venture to say that such downstream learning occurs all around your members without them even realizing it. I've been told that "Where your attention goes, you go too," and your group's attention is keenly focused upon matters of importance ranging from providing gloves to needy youngsters to raising funds for critical educational programs. Therefore, it seems to me that your impact is far-reaching, laudable and to be celebrated. Simply said, I admire and acknowledge the downstream effect of your efforts and thought it only fair that you and your colleagues should know how far the ripples created by the stone of care and knowledge you've tossed into the pond of society travel. All the way from groups throughout South Dakota, to me and my son, to my community and beyond. So many benefit from the time, effort and contribution of action takers like those in your group.

So spread the word of congratulations to your members one and all. Your work is integral to building strong values, strong minds, strong families, and a better world for us all. I happen to appreciate the ripple effect you've created in me and choose to throw some stones in that pond myself!

Best Regards,

*Angelique**

* Approved for publication by Angelique Chianese-Swann, Sunrise, Florida.

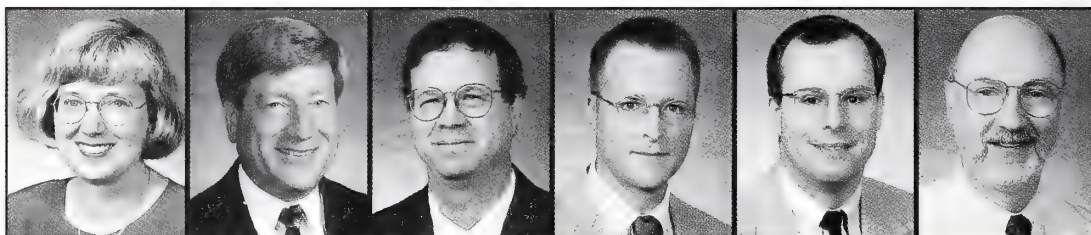
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Update In Platelet Therapy



Transfusion of platelet components has continued to increase at a rate faster than any other blood component for two decades, mainly to support oncologic, transplantation, and cardiothoracic surgery services.

Two platelet products are available. The first is called random donor platelets. This product is obtained from whole blood within eight hours after collection by a double centrifugation technique. The platelet concentrate is suspended in 50ml of plasma. A similar buffy coat product in Europe is called recovered platelets. One unit of random donor platelets contains at least 5.5×10^{10} platelets and has a pH of 6.0 or higher, a shelf life of five days, and kept at room temperature with gentle agitation, and should raise the platelet count 5,000 to 10,000/ul in a recipient weighing 70 kg. Random donor platelets are usually prepared in pools of four to eight units with an expiration date of four hours because the pooling process requires breaking the hermetic seal.

The advent of apheresis instruments has facilitated the collection of platelets from a single donor equivalent to six to ten random donor units or about 3×10^{11} platelets suspended in 300ml of plasma. This single unit is stored and given in the same manner as a single random donor platelet unit with the same shelf life of five days.

Platelets should have the same ABO and Rh group as the recipient, if possible.

There is a continuing debate about the preference of use of random donor versus single donor or pheresed platelets. The advantage of the latter is from the exposure to fewer allogeneic products (4 to 8 donors with random donor platelets versus a single donor unit of equivalent platelet dose). This results in less alloimmunization to HLA antigens which can produce febrile nonhemolytic transfusion reactions or produce antiplatelet antibodies which cause markedly shortened platelet survival leading to so called platelet refractoriness. There is also a decreased risk of transfusion transmitted disease with single donor platelets due to less donor exposure. Single donor

platelets are necessary when crossmatch compatible or HLA matched platelets are selected for patients who have already developed platelet antibodies. However, single donor platelets are much more expensive than random platelet pools.

Both single and random donor platelet products are used to stop bleeding in patients with thrombocytopenia or platelet dysfunction, or can be used prophylactically to prevent bleeding in the same patients. There is a significant controversy as to transfusion triggers for platelet transfusion. The threshold for an actively bleeding patient, or a patient about to undergo an invasive procedure, is 50,000/ul. A preoperative level of 100,000/ul is indicated for major surgery such as cardiovascular, neurosurgical, or ophthalmologic procedures. Conditions associated with platelet dysfunction, such as uremia, or aspirin-like drugs, can alter these thresholds. Transfusion of platelets to patients with known peripheral destruction of platelets, or due to antiplatelet antibodies secondary to drug therapy, or other causes such as disseminated intravascular coagulation, is only a stopgap measure. Appropriate therapy of the basic disease process to prevent platelet destruction is required.

The most controversial level is the threshold for prophylactic platelet transfusion in the oncology patient undergoing chemotherapy. The threshold advocated in a study by Gaydos et al, is 20,000/ul, while others have recommended levels as low as 5,000/ul, in stable thrombocytopenic patients. Others have compromised at 10,000/ul to provide a cushion of safety. Since these lower values do have support from clinical trials and since utilization of all transfusions is being monitored by third party payors, further studies to determine the proper thresholds is necessary.

There are several adverse reactions to transfusion of platelet products. Hemolytic reactions from antibodies, usually anti-A and anti-B, when ABO incompatible random donor units are necessary, anaphylactic reactions, and transfusion related acute lung injury, or TrALI, are serious but rare. Allergic and febrile nonhemolytic reactions are more common but

less serious. Bacterial contamination of platelets which are kept at room temperature has been discussed in a previous editorial.

The presence of antiplatelet antibodies acquired from previous transfusion or pregnancies can lead to failure of platelets to rise after transfusion. This is called platelet refractoriness. This condition may be determined by measuring the platelet level response ten minutes to one hour after transfusion of 1×10^{11} platelets (corrected for body surface area). When the increment is less than 7,500/ul after two consecutive transfusions, platelet refractoriness is present. Nonimmune causes of platelet consumption such as fever, sepsis, and splenomegaly may also produce less than optimal platelet responses. These are often after one hour and are not as severe.

To achieve adequate response in patients with platelet refractoriness, platelet crossmatching is available. The antibodies responsible are often anti-leukocyte HLA antibodies. Appropriate platelets negative for the corresponding HLA antigens may be provided from apheresed donors. The problem is that other antiplatelet antibodies may result in failure of this approach. Other measures such as high dose intravenous gamma globulin, corticosteroids, and plasmapheresis may also be tried, but often are not effective.

Since the realization that leukocytes are the principle cause of many adverse transfusion reactions, efforts to reduce leukocytes in platelet concentrates may result in fewer febrile nonhemolytic reactions, adverse immunomodulatory effects such as increased postoperative bacterial wound infections, HLA alloimmunization, and transfusion transmitted infections from cytomegalovirus and human T-lymphotrophic virus 1. Since leukocytes ingest bacteria, more bacteria may be removed. It has been suggested that since leukocytes may carry Creutzfeldt-Jacob prions, leukocyte removal may also prevent this disease if these prions are transmitted by transfusion.

Sensitive filters may remove leukocytes at the time of transfusion – bedside filtration or at the time of collection – prestorage filtration. Since prestorage filtration prevents the accumulation of cytokines and leukocyte fragments which accumulate during storage and cause febrile nonhemolytic reactions, prestorage leukocyte filtration is preferred. Apheresis systems for platelet collection often are now leukocyte reduced but random donor platelets may not be leukocyte reduced.

In order to produce better platelet products or platelet substitutes, a number of new techniques are under investigation. Synthetic additive solutions and cryopreservation are being evaluated. Lyophilized platelets and platelet microparticles have shown promise

in animal experiments. Platelet substitutes such as microspheres, liposomes, and gels have been studied. Psoralen compounds activated by ultraviolet light may destroy viruses in platelet products.

The use of nonspecific lineage stimulants to platelet production, such as native and recombinant interleukins, and the recent isolation and clinical trials with lineage specific thrombopoietin may reduce the number of platelet transfusions needed. Trials are continuing.

J. F. Barlow, MD
Editor

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Extenuating Circumstances

A periodic column of personal, ethical, and socioeconomic reflections on medicine.

The Birth, Development, And Legacy of Roman Medical Thought

Chris Oliver, MS III

The practice of medicine which evolved to include what we know today as Roman medicine set the stage of medical thought for the next 1700 years. It included some of the most recognizable figures in early medical thought. To begin to understand Roman medicine one must first have some understanding of the early influences on the Roman people and medicine itself.

One of the first populations to influence early Rome were the Etruscans, from whom the Romans borrowed many religious, cultural and civic practices. Much of what is known about early Roman agriculture and the corresponding medicine, comes from the writings of Cato the Elder, a Roman statesman and writer (234-149 BC). From Cato's writings, Roman medicine appears to have been a mixture of religion, superstition and folk remedies. Etruscan-adopted gods held the predominant role in this medical scenario, almost no aspect of human life was without its own special deity. Some examples of these gods include: Carna, the goddess who protected children from harmful birds;¹ Alemona, who guarded the foetus;² Rumina, the goddess of breast-feeding;² and Robigus, who protected against mildew.¹ Disease was viewed as a manifestation of the god's displeasure. Logically, "medicine" predominantly employed religious rites and secondarily, folk remedies. It happens that Cato's cure-all favorite was cabbage.²

In the Etruscan and early Roman era there were no specific doctors as we recognize them as a professional group today. "Medicine" was practiced by the head of the household (*pater familias*), and the village priests. As evidenced by the practitioners, medicine was separated into two spheres: public health and private health. Priests were charged with the health of the masses and often employed the practice of reading omens to predict epidemics. The interpreted omens could be as simple as the direction of a bird's flight, or as complex as comparing the liver of a freshly sacrificed animal to the constellations present in the night sky (a practice known as *haruspication*).⁴ Due to their status, priests were also given the responsibility of petitioning the gods in the hopes of predicting and/or averting epidemics.

The "medicine" practiced in the Roman home can be separated into three specific areas: rites to empower healing gods, rites to protect against disease causing gods, and empirical folk medicine. One example of a frequently employed folk remedy for swelling involved dipping wool into a mixture of pounded bitter leaves (*rue*) and fat.⁴ Folk remedies of this time reflected the community's agricultural values, often using ingredients such as eggs, honey, chicken and insects.⁴

Oddly enough, Roman medical thought was closely tied to political thought, and at this time was notably anti-Greek. Romans had an immense distrust for Greek medicine and its practitioners as exemplified by this statement of Cato's: "The Greeks...are a quite worthless people, and an intractable one... When that race gives us its literature, it will corrupt all things, and even the more if it sends here its physicians. They have conspired together to murder all foreigners with their physic."²

The turning point for the Greek influence on Roman medicine came in 295 BC when a plague which had befallen Rome failed to respond to local intervention. As a final effort Roman priests enlisted the help of Asclepius, the Greek god of medicine. A temple dedicated to Asclepius was constructed on an island in the Tiber river outside of Rome itself as a cautious experiment. The plague subsided and the Romans reacted by embracing the Greek gods as well as the Greek physicians who followed.⁴

The history of Greek medicine before its merger with Roman interests reflected mainly Egyptian influences. The Egyptians had recognized and trained physicians as professionals for many years, and were advanced at recognizing disease pathology. Egyptian papyrus dating from the 16 and 17 centuries BC record surgical treatises concerning clinical cases, the splinting of fractures using palm fiber splints, diseases of the eyes and ears, and detailed histories as well as treatments.² Mummification had yielded the Egyptians sound anatomical data many years ahead of most other cultures. Increased knowledge of pathology and treatments lead to increased specialization by physicians, to which some historians attribute the subsequent stagnation of Egyptian medical advances towards the 6th century BC.²

The father of modern medicine, Hippocrates, was born on Cos in 460 BC into a family of physicians. Hippocrates is given credit for writing the Hippocratic Corpus, which is a treatise dealing with many aspects of medicine. The Corpus exhibited a new style of medicine; one which tried to unite its practice as both an art and a science, as well as liberate it from ever-present superstitions.⁴ In his development of the disease entity, Hippocrates drew upon a poorly defined Egyptian theory involving humors. The four main humors included blood, phlegm, bile, and melena. Disharmony of the humors within the body was thought to manifest itself in disease.⁴ Hippocrates also believed that disease could be instigated by the rising of residues (a byproduct of digestion) which displaced pneuma (life giving air). The theories of humors and pneuma, as expressed by Hippocrates, acted as the foundation for medical thought for 1500 years.

Instructions included within the Corpus for reestablishing a proper humoral balance in a patient often involved the use of cathartics, emetics, blood-letting, and strict dietary regimes.² Dietetics evolved into the most advanced area of Greek medicine, and were utilized in both therapeutic and preventive treatments. Foods were classified into complex categories that supplemented a lacking humor or increased excretion of excess humors. Exercise and baths were also important treatments employed by early Greek physicians. Only when a disease process proved refractory to all conservative treatment options were patients considered for surgery. Surgical treatments in this era progressed in areas that lent themselves to the techniques of the day. For example, cataract surgery was often performed as it rarely resulted in further morbidity or mortality. However, when situations required surgical intervention, hernia repairs, amputations, and oncological surgeries were all attempted.²

The first Roman figure to leave a lasting impact on medicine was the physician Galen, who was born in 129 AD into the Roman upper-class. Galen began his study of medicine at the age of 16, and continued for 12 years (making him a specialist even by today's standards).² Much of Galen's practical experience must have been gained during his years working as a surgeon for a school of gladiators, a prime training ground for a physician interested in anatomy. Galen eventually moved to Rome where he became the private physician to Marcus Aurelius.⁴ During his time as court physician, Galen produced more than 40 volumes of medical works, 21 of which still exist. His most monumental discoveries included the function of the recurrent laryngeal nerve and the contribution of intercostal muscles in phonation, as well as the function of arteries (earlier theories postulated that arteries carried pneuma

while veins carried blood).⁴ Galen also influenced public perceptions of medicine by engaging in public exhibitions, disguised as experiments, that drew large crowds.² The Roman people were so interested in scientific knowledge that Galen was asked to repeat many of his 'experiments' for notable officials in Rome, including future Prefect of Rome, Paulus.⁴ Single-handedly, Galen did much to influence the way that medicine was practiced and perceived in the Roman Empire.

Increasing awareness for the role physicians could play in the health of a family, community or city, governmental changes were adopted to increase the number and effectiveness of physicians. In 46 BC Julius Caesar granted Roman citizenship to all physicians practicing in Rome regardless of nationality, also around this time other provinces in the Empire granted physicians a tax-exempt status, encouraging the training of an adequate number of physicians.² As physicians were increasingly recognized as a professional group and an asset to the Empire, they began to form guilds and colleges to promote the ethical practice, and training of physicians.

The practice of universal medical coverage, which the Romans modeled after the Greeks, has particular relevance today. It can be demonstrated that the Romans had a system through which cities hired physicians (the number based on population figures) to care for the health needs of all the citizens of the city.¹ This public health system was in place at least as early as 50 BC, and continued until the fall of the empire. The position of the public physician appears to have been one of great honor, and the salaries were extremely generous. Public physicians were employed to care for the entire community, rich and poor alike. One Greek record indicates that resident aliens were also provided treatment.¹ Of course, upper class Romans could, and often did, employ the services of private physicians to receive treatment in the comfort of their own homes. Private physicians were often compensated for their services by contracting for a cure, and were paid only if the cure was forthcoming. Physicians at this time were subject to a form of malpractice that could range from repayment for damaging a slave during surgery, to being arrested for causing the death of a Roman citizen.¹

One of the greatest promoters of medicine in the Roman Empire was the ever-present army. As it was not uncommon to lose half a fighting force to disease rather than combat, the Roman generals quickly learned that it was advantageous to have a supply of medical physicians accompany their armies on conquests. Mobil hospitals were set up in the rear of the fighting forces to care for the sick and wounded, while permanent

military hospitals were located in fortresses around the empire (interestingly, no examples of civilian hospitals have been found from this time period).² Medical officers were also given the responsibilities of finding safe drinking water, determining safe camping sites and looking after the physical well-being of the troops.

Certainly there was a vast array of afflictions that the Roman physician attempted to treat, despite limited knowledge by today's standards. Many examples of complex surgery were performed without the assistance of anesthetics. Another amazing aspect of Roman medicine was the quality and craftsmanship of the tools the physicians used. In fact, the quality of Roman medical instruments has only been recently surpassed.² Medical instruments were made of bronze and brass, while removable scalpel blades were made of steel. A skilled Roman craftsman could forge hollow syringes, and the needles to fit within them, which were used in cataract removal.²

Roman medical thought reigned much longer than its corresponding empire, Roman based theories on health, disease, surgical interventions, and pharmacological treatments remained prominent until the 1850's. Disease was perceived as an imbalance of the body humors, not the result of infection or mutation. Physicians up until the early 19th century employed pharmacological agents such as laxative/cathartics and emetics, with the idea of hurrying along the inevitable course of a disease.³ Bleeding treatments, which flowed directly from the humoral theory, has only fallen out of favor within the last 120 years. At one time, leeches were in such high demand that physicians in Europe often cared and cultivated a personal supply. So common was the practice of bleeding, that one account records a Chandler bleeding himself until fainting and subsequently employing an emetic to self medicate a case of headaches and chills.³

The transition of medicine from superstitious and religious spheres into scientific and professional spheres is one of the greatest legacies of Roman medicine. With the help of early Greek, Egyptian and Etruscan ideas, Rome's physicians developed many theories and practices that continued to be utilized until the mid-nineteenth century.

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Phillip Becker, MD 202 S. Harvard Vermillion, SD 57069	AN	Cynthia Huntimer, MD 5401 W. 26th St., #305 Sioux Falls, SD 57106-0603	CHP
Andrew Binamira, MD PO Box 167 De Smet, SD 57231	IM	Thomas C. Isaacson, MD North Central Heart Institute 1100 S. Euclid Ave. Sioux Falls, SD 57105	CD
Patricia Bowers, MD Mallard Pointe Surgical Ctr 1201 Mickelson Dr. Watertown, SD 57201	AN	David L. Kapaska, DO Avera McKennan Hospital 800 E. 21st St. Sioux Falls, SD 57105	FP
Oldrich V. Bubenik, MD Brookings Medical Clinic 400 22nd Ave. Brookings, SD 57006-2497	GS/ON		
Phillip Burket, MD Central Plains Clinic 1100 E. 21st St. Sioux Falls, SD 57105	CD		
Etson Cameron, Jr., MD 4601 E. 26th St. Sioux Falls, SD 57110	Resident		
Sheng-Jing Dong, MD 4701 S. Oxbow Ave., #309 Sioux Falls, SD 57106	Resident		
Eduard Dvorak, MD Medical X-Ray Center 1417 S. Minnesota Ave. Sioux Falls, SD 57105	RO		
Richard Fawcett, MD 416 N. Oak Ridge Rd. Brandon, SD 57005	IM/ID		
William Giese, MD Avera Sacred Heart Hospital 501 Summit St. Yankton, SD 57078-3855	RO		
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Neuraminidase Inhibitors And Relief Of Influenza Symptoms

Michael Lemon, PharmD; Fort Meade, SD

Every year influenza causes many absences from work and school, numerous hospitalizations, and about 20,000 deaths nationwide.¹ Until recently the only medications available to provide relief from influenza symptoms were amantadine and rimantadine. These drugs, however, are only effective against influenza type A. Now a new class of medications called neuraminidase inhibitors has been introduced to provide symptomatic relief for both type A and type B influenza.

Neuraminidase inhibitors zanamivir and oseltamivir are indicated for the treatment of acute uncomplicated illness due to influenza infection in patients who have had symptoms for two days or less.^{2,3} These medications work by inhibiting viral neuraminidase, an enzyme necessary for viral replication of both influenza type A and B.^{2,3} The medications have demonstrated a 1 to 1.5 day reduction of moderate or severe influenza symptoms.¹⁻⁶ Efficacy in preventing serious complications such as bacterial or viral pneumonia has not been demonstrated with either medication.¹

The neuraminidase inhibitors are delivered via different routes, which may influence product choice for certain patients. Zanamivir is a powder for inhalation while oseltamivir is a 75 mg capsule for oral administration.^{2,3} Both of these drugs are taken twice daily.

Particular caution with zanamivir should be observed in patients with severe chronic obstructive pulmonary disease (COPD) or asthma because of the possibility of bronchospasm in these patients.³ If zanamivir is used in patients with underlying respiratory disease, a fast acting inhaled bronchodilator should be available.³ In addition, safety and efficacy have not been shown for zanamivir use in patients with chronic pulmonary disease or patients with high risk underlying medical conditions.³ Efficacy data in patients with chronic cardiac or respiratory disease has not been established for oseltamivir.² Dosage adjustment is recommended for oseltamivir when it is administered to patients with renal impairment.² Another precaution for both medications, issued recently in a Public Health Advisory by the Food and Drug Administration (FDA),

is considering the potential existence of untreated primary or concomitant bacterial infections in patients with suspected influenza.⁷

Adverse effects vary with each medication. The most frequently reported side effects for zanamivir were headache, diarrhea, nausea, dizziness, and respiratory symptoms, although these were similar to placebo.^{1,3} Nausea and vomiting were the most frequently reported side effects with the use of oseltamivir, each occurring at rates approaching 10%.^{1,2} The nausea and vomiting usually occurred within the first two days of oseltamivir therapy; however, less than 1% of patients discontinued therapy because of these symptoms, which can be minimized by taking with food.² Other adverse events associated with oseltamivir were bronchitis, insomnia, and vertigo.²

When considering a neuraminidase inhibitor for therapy, several issues should be considered. A significant concern with these medications, as well as amantadine or rimantadine, is that they must be started within two days of symptom onset. Many patients may not seek medical attention within this time frame.⁸ Another issue involves the difficulty in administering zanamivir by some patients⁹ although this may be overcome with good patient education. In vitro resistance has been reported infrequently for zanamivir and oseltamivir and this is another possible concern. However, the clinical significance of the resistance is unknown at this time.¹⁻³

Direct comparisons do not exist between neuraminidase inhibitors and amantadine or rimantadine in the treatment of influenza A, so the selection of which drug to use must be based on other factors. Adverse effects might be one basis of comparison. Central nervous system side effects including dizziness, nervousness, anxiety, and difficulty concentrating occur with amantadine, and to a lesser extent with rimantadine, and these two drugs should be used with caution in patients with seizure disorders.¹⁰ The nausea problems of oseltamivir and the respiratory problems of zanamivir have been addressed above. Dose reductions for renal dysfunction should be made with oseltamivir, amantadine, and rimantadine.¹

Finally, when cost is considered, the neuraminidase inhibitors are more expensive, followed by rimantadine, and then amantadine.¹

Possible advantages to using the neuraminidase inhibitors include the treatment of both type A and B influenza, and infrequent central nervous system side effects. The neuraminidase inhibitors have also demonstrated efficacy in the prophylaxis against influenza although they have not been approved for that indication.^{11,12}

Based on a reduction of median time to symptom improvement of 1 to 1.5 days, where do these medications fit into therapy? These medications are not designed to replace the influenza vaccine, which is our best means of prevention. The influenza vaccine costs around \$7 while these new medications cost about \$50 and, if an accurate diagnosis of influenza is warranted, the rapid diagnostic tests for influenza cost between \$15 and \$20.¹³ Economic considerations make administering the influenza vaccine to at-risk patients the primary goal. The neuraminidase inhibitors may be used in patients who were not vaccinated, in cases when the vaccine was ineffective, and to fill in immunity gaps resulting from the influenza vaccine for a given year.

The neuraminidase inhibitors provide new options for the treatment of both influenza type A and B. The place in therapy for these medications will continue to evolve, as more data becomes available. Several questions remain, such as how do these medications compare to amantadine and rimantadine; are complication rates decreased; will resistance become a problem; and will efficacy data become available for high risk patients? Finally, it should be stressed again that these medications are not designed to replace the influenza vaccine but should be used as an adjunct in the treatment of influenza.

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Dr. Douglas M. Traub, RACP, has been appointed medical director of Physicians Care, a Rapid City physician owned independent practice association. Dr. Traub is a board-certified internist at the Rapid City Medical Center.

* * * * *

Dr. Ken Diamond has taken over as medical director of Westhills Village Retirement Community. Dr. Diamond replaces the retiring Dr. Reuben Bareis. A board certified Family Practice physician, Dr. Diamond established his practice at University Physicians with a special interest in geriatric medicine.

* * * * *

Sioux Falls native, **Dr. David Auch**, has started practicing at the Prairie Medical Clinic in Winner. Dr. Auch recently finished his Internal Medicine residency and will practice primarily at the Mission Medical Clinic. Dr. Auch & his wife Teri have two grown children and have made their home in Winner.

* * * * *

Dr. Robert Rietz, of Brookings, has been awarded the American Academy of Otolaryngology – Head and Neck Surgery's prestigious Honor Award. The Award recognizes those who have contributed service to the Academy with presentation of an instrument course, scientific paper, or participation of a continuing education committee or faculty. The American Academy of Otolaryngology – Head and Neck Surgery is a national organization of 10,000 physicians. Dr. Rietz is one of only 53 specialists to receive the Honor Award.

* * * * *

Two physicians have recently joined the Queen of Peace medical staff in Mitchell. **Dr. Joseph Tricarico** will practice with Mitchell Anesthesia, P.C., and **Mark Withrow, M.D.**, will be practicing OB/GYN with the Dakota Women's Clinic. Dr. Tricarico and his wife, Sara moved to Mitchell from Scottsdale, Arizona. Dr. Withrow is a Brookings native, and comes back to his home state after leaving a private practice in Johnson City, Tennessee.

* * * * *

Dr. Richard Honke recently received the Edward J. Bott, M.D., Memorial Award. Dr. Honke received the award from the Department of Family Medicine of USD School of Medicine, which is given annually recognizing the honored physician's outstanding job in the area of teaching family practice physicians.

Dr. Elizabeth Gravley recently joined the staff of Day County Medical Center and Lake Area Hospital. Dr. Gravley grew up in Minnesota and did her undergraduate work at Concordia College in Moorhead, MN. She received her Bachelor of Arts in biology and her medical training at the University of Minnesota in Minneapolis. Dr. Gravley, her husband Kurt and their two sons now live in Webster.

* * * * *

Dr. H. Thomas Hermann has been named president of the South Dakota Academy of Family Physicians. Dr. Hermann received his bachelor's degree in chemistry from St. Olaf College in Northfield, Minnesota. He went on to attend USD School of Medicine in Vermillion, where he received his medical degree in 1984. Dr. Hermann practices in Sturgis, SD.

* * * * *

Dr. Mary Milroy, a Yankton breast surgeon, recently received the 1999 Partner Award from All Women Count!, South Dakota's breast and cervical cancer control program. Dr. Milroy is a founding partner of the South Dakota Women's Cancer Network. She provides several presentations each year in South Dakota on breast cancer issues and is active in many All Women Count! activities.

* * * * *

Dr. Dwight F. King is the newest member on staff at Yankton Medical Clinic. Dr. King specializes in neurology and is a graduate of American University of the Caribbean, Montserrat, West Indies.

* * * * *

Brookings Medical Clinic announces the association of **Dr. Richard Gudvangen**. A Minnesota native, and more recently from Englewood, Colorado, Dr. Gudvangen specializes in obstetrics and gynecology. He received his medical degree from the University of Texas Health Science Center in San Antonio.

* * * * *

Dr. Zhi Zhang has joined the Avera St. Luke's medical staff in Aberdeen. Dr. Zhi is a graduate of China Medical University in Shenjan, China, and completed a fellowship in clinical cardiac electrophysiology at Montefiore Medical Center in New York. Prior to coming to Aberdeen, Dr. Zhi practiced emergency room medicine at Kentucky River Medical Center in Jackson, Kentucky.

Dr. Gregory Erickson, a board eligible internal medicine physician, joins the Avera Sacred Heart medical staff in Yankton. Dr. Erickson graduated from the University of South Dakota School of Medicine in 1986, and completed his residency in internal medicine there, as well. He is a member of the medical staff at Sioux Valley and McKennan hospitals in Sioux Falls.

* * * * *

Dr. Marc Boddicker recently served as faculty at the Tumescence Technique Liposuction Workshop in Loveland, Colorado. Dr. Boddicker gave clinical instruction, as well as lecturing on instrumentation and practice management.

* * * * *

Rapid City orthopedic surgeon, **Dr. Dale Anderson**, was a featured speaker at the fall 1999 Board of Councilors in Chicago. Dr. Anderson lectured on patient-physician relationships. The Board of Councilors advises the American Academy of Orthopaedic Surgeons and the American Association of Orthopaedic Surgeons.

* * * * *

Dr. Roger Knutson, Rapid City, has been recertified by the American Board of Dermatology. Dr. Knutson was also designated as a lifelong diplomate by the Board in 1987. He is also board certified in internal medicine.

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The **University of South Dakota School of Medicine** received national recognition for an eight-part series on depression. The Alliance for continuing Medical Education presented the school with the 2000 award for the Most Outstanding Industry-Supported Certified CME Activity for its audio conference series entitled *Dimensions of Depression*. Dean of Academic Affairs and CME at USDSM, Dr. Robert Raszkowski said the success of such a program is primarily due to the need for physicians to be on the cutting edge of their profession. The award was presented to representatives from the School of Medicine in January at the Alliance's annual conference in New Orleans.

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Rapid City physician, **Dr. John Fox**, recently qualified as a certified medical review officer. The certification enables physicians to evaluate drug and alcohol results in the workplace, as well as manage chemical dependency.

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Three Sioux Falls physicians are the only ones in South Dakota to be designated as ASH Specialists in Clinical Hypertension. **Dr. Edward Zawada, Jr., Dr. Robert Santella**, and **Dr. Paul Kellerman** are among only 548 in the United States to be given this designation.

The ASH Specialists Program was formed by the American Society of Hypertension for the specific purpose of identifying and recognizing those physicians with expert knowledge and skill in the management of clinical hypertension and related diseases.

* * * * *

Dr. Khurram Ali, has recently joined Avera United Clinic of Bowdle. A graduate of Dow Medical College in Karachi, Pakistan. Dr. Ali completed two internships at Civil Hospital in Karachi for internal medicine and surgery. He completed his residency in internal medicine at the State University of New York at the Health Science Center at Syracuse.

* * * * *

Dr. Robert McWhirter of Mitchell is one of only a few hundred physicians around the world who recently completed "The Advanced Team Physician Course." The course was sponsored by the American College of Sports Medicine. Dr. McWhirter is board certified in orthopedic surgery and has been practicing sports medicine in South Dakota for the past 15 years.

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Dr. Sanjeevi Giridhar was among a select group of clinicians invited to participate in an interactive psychiatry advisory forum in Titusville, NJ. Dr. Giridhar is the medical director of Northeastern Mental Health Center in Aberdeen.

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Aberdeen psychiatrist, **Dr. William Pettit**, presented "Hope for Change: A Principle-Based Approach to Awakening the Health in People." The presentation was given to family practice physicians at the Kaiser Foundation Hospital in Honolulu.

* * * * *

Dr. Richard Rak recently received a three-year appointment as cancer liaison physician for the Hospital Cancer Program at Avera St. Luke's Hospital, Aberdeen.

Also appointed as cancer liaison physician was **Dr. Justin Green**. He was appointed for the Hospital Cancer Program at Rapid City Regional Hospital's Cancer Care Institute. Dr. Green will work with the hospital's cancer committee and with the American Cancer Society. The Cancer Liaison Program is an integral part of the Commission on Cancer of the American College of Surgeons.

* * * * *

Dr. Brijesh Kapoor is the latest addition to the medical staff at Philip Health Services, Inc. Dr. Kapoor's background includes preventative medicine and plans to develop special clinics for those suffering from arthritis, diabetes, and an addiction to smoking.

Sioux Falls native and longtime South Dakota physician **Dr. Robert Quinn**, was inducted into the 1999 South Dakota Hall of Fame. Dr. Quinn has been a pivotal force in moving medicine forward in the state. He, along with Drs. Karl Wegner, George Rinker, and Warren Jones, helped develop the School of Medicine from a two-year program to a full-fledged four-year school with residency programs. In 1980 Dr. Quinn became Chairman of the Department of Surgery and Surgical Subspecialties. Two years later he was named the Vice President of Health Affairs and Dean of the School of Medicine.

Dr. Quinn was a past president and honorary member of the South Dakota State Medical Association. He and his wife, Ruth, have four children, and currently reside in Spearfish.

* * * * *

Dr. Alan Brevik was the recipient of the “Welcome Back Award” for 2000. The Yankton physician received the honor, which cites excellence in psychiatry. Dr. Brevik has been practicing medicine in South Dakota since 1970. In the 1980s, while serving his tenure at the South Dakota Developmental Center, he discovered that depression caused many of the negative behaviors exhibited by some of his developmentally disabled patients. Dr. Brevik developed a number of specialized psychopharmacological treatment strategies for this difficult-to-treat and often ignored population. The “Welcome Back Awards” is a national program launched in 1998 to assist in eliminating the stigma associated with depression and to help the public better understand that depression is treatable.

* * * * *

Yankton named it's Citizen of the Year for 1999 and the honor went to **Dr. Ken Halverson**. The longtime Yankton doctor and co-founder of the local chapter of Habitat for Humanity was praised for his three decades of service as a general surgeon in Yankton, for his involvement in Habitat, and for his efforts to improve mental health offerings in the community. Both Dr. Halverson and his wife Mary have exhibited their giving nature since they settled in Yankton 36 years ago. When receiving the honor, it was said that their volunteerism has been exemplary and their involvement with Habitat for Humanity brings their love for their community and its people to the forefront as a shining example of humanitarianism. Mrs. Halverson received the Citizen of the Year award in 1985. Dr. Halverson is an honorary member of the South Dakota State Medical Association.

* * * * *

Two South Dakota doctors have completed continuing medical education requirements to retain active membership in the American Academy of Family Physicians. They are **Dr. Egon Dzintars**, Rapid City, and **Dr. Arthur J. Raymond**, of Hot Springs. Members

of the AAFP are required to complete a minimum of 150 hours of accredited CME study every three years.

* * * * *

Several area physicians recently became board certified in their respective specialties. They include: **Dr. Marina Petukoff**, Rapid City, board certified in internal medicine; **Dr. Gopalan Sridhar**, Huron, board certified in pediatric and adolescent medicine; and **Dr. Daniel Reiffenberger** and **Dr. Kenneth Peterson**, both of Watertown and both board certified in sports medicine.

* * * * *

Dr. Alan Lawrence was among some 1500 initiates worldwide to become a Fellow of the American College of Surgeons. The Watertown surgeon received his fellowship during convocation ceremonies at the College's recent 85th annual Clinical Congress in San Francisco. Dr. Lawrence has a strong professional interest in laparoscopic and minimally invasive surgery, breast cancer surgery, vascular, and thoracic surgery.

* * * * *

Dr. Marty Allison was recently admitted as a Fellow of the American Academy of Pediatricians. Fellows of the AAP are recognized by their colleagues and the Board of Directors as demonstrating excellence in training, leading to board certification, as well as demonstrating high ethical and professional principles and conduct.

* * * * *

The National Academy of Internal Medicine recently notified **Dr. Douglas Van Marel** that he has been certified as a Diplomate in internal medicine. The Huron physician passed rigorous testing, as well as met certain other requirements.

Dr. Van Marel works with patients suffering from heart and lung conditions, asthma, gastrointestinal diseases, infections diseases, rheumatologic, and neurologic disorders.

* * * * *

Dr. Daniel Heinemann of Canton, and **Dr. Thomas Groeger** of Deadwood were both honored for their service to the specialty of family practice medicine. The American Academy of Family Physicians recently honored Dr. Heinemann for his 15 years of membership and Dr. Groeger for his 10 years of membership in the Association.

The AAFP pays tribute to those Academy members whose years of involvement have contributed significantly to the position of prominence family physicians occupy in today's health care delivery system.

Dr. Heinemann was also appointed to serve as a member of the AAFP's Commission on Legislation and Governmental Affairs for 2000.

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by age 40 . . .	1 out of 217
by age 50 . . .	1 out of 50
by age 60 . . .	1 out of 24
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by age 80 . . .	1 out of 10

Source: NCI Surveillance, Epidemiology, and End Results (SEER) Program and American Cancer Society, 1993.

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Tell your lady patients to be good mothers and for Mother's Day get a mammogram!

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Medical Director



Nodal Metastases With Unknown Primary - An Unusual Presentation Of Carcinoid Tumor

Scott Baker, MSIII; Asish Mukherjee, MD

ABSTRACT

Carcinoid tumors arise from neuroendocrine cells and produce their symptoms mainly through secreted amines, and by a local desmoplastic response. The critical issue in the management of advanced carcinoid tumors is preservation of quality of life and symptomatic relief. This is because of the characteristic indolent growth which makes survival a secondary consideration, and the relative rarity of the condition. Although systemic therapy has been shown to improve symptoms, true survival benefit has not been established. We present a case of carcinoid tumor that has metastasized to mesenteric nodes, and probably other locations, with an occult primary site. The patient remains completely asymptomatic and continues to enjoy a normal lifestyle. No references were found in the literature concerning the management of asymptomatic, but metastatic carcinoids. This case thus constitutes a unique situation in which further treatment may not be beneficial and may even be harmful. Nevertheless, additional treatment is an important consideration in view of the known poor survival of those with metastatic disease versus localized, resectable tumor. However, the concept of medical therapy to improve survival in an asymptomatic individual, though theoretically attractive, has little precedence. In this article we have tried to address the therapeutic dilemma posed by this unusual clinical scenario.

INTRODUCTION

Carcinoid tumors represent neuro-endocrine neoplasms with variable malignant potential. Most often, they occur as primary gastro-intestinal tumors, but other locations have been described. Carcinoids arise from the Kulchitsky cells of the crypts of Lieberkuhn which are found throughout the gastro-intestinal (GI) tract from the cardia to the anus, being more common in the appendix and duodenum. In addition to the GI tract, they may be found in diverse locations like the bronchus, lungs, ovary, thymus, kidney, thyroid, etc. They produce a large part of their clinical effects by hormonal secretions such as serotonin, histamine and substance P, and local effects secondary to desmoplasia. Carcinoid manifestations may be diverse secondary to their histologic and endocrine heterogeneity.

Treatment for these tumors is determined by the location, size, extent, and associated symptoms. Simple

excision is advocated for localized tumors smaller than 2cm, while radical curative resection is offered to larger or invasive tumors even in the presence of hepatic metastasis. Debulking of widespread tumor is attempted in advanced cases. Hepatic ischemic therapy, chemotherapy, and even liver transplant have been tried for unresectable tumors. Although adequate research has been recorded in the literature with respect to the efficacy of aggressive surgery and adjuvant systemic therapy, the outcome has been invariably measured by the control of symptoms. No conclusive references to any survival advantage produced by systemic therapy in asymptomatic patients could be found.

In the light of this inconclusive literature, we present a case which poses a therapeutic dilemma. This is a patient found to have metastatic carcinoid in mesenteric lymph nodes without any evidence of the primary tumor detected after an exhaustive battery of investigations. Residual disease was noted on octreotide scan, but the

patient remained free of symptoms. Therefore, we are left with the question of the best way to treat this patient.

CASE REPORT

PRESENTATION

A 77-year-old white male patient without any significant medical history presented with a four month history of abdominal pain. He had been hospitalized twice in the preceding three months with similar complaints. His abdominal pain was noticeably postprandial and colicky in nature. It was not well localized and not associated with nausea, vomiting, melena, or noteworthy changes in bowel habit. He had lost 30 pounds in body weight in the preceding three months. On examination, his vital signs were stable, and his abdomen was soft and non-distended. No masses or organomegaly were appreciated, but mild tenderness was noted on deep pressure in the right lower quadrant. Auscultatory findings were within normal limits at the time of examination.

INVESTIGATIONS

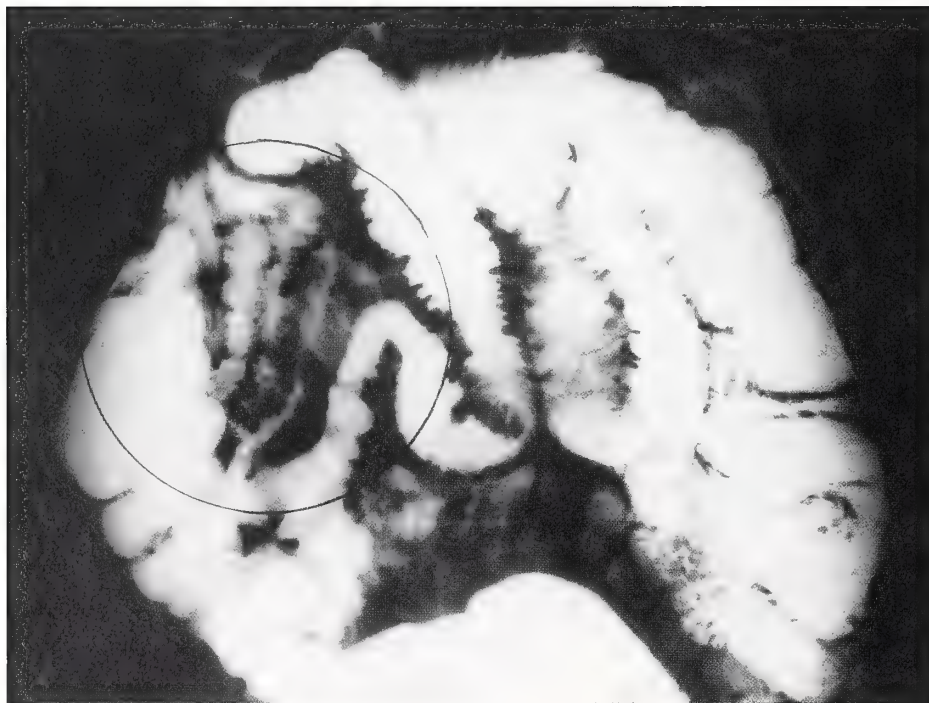
In the course of his prior admissions, a clinical diagnosis of small bowel obstruction was entertained and a series of investigations were performed. Supine and upright abdominal films demonstrated multiple air fluid levels with rectal gas thereby pointing to an incomplete small bowel obstruction. Two upper GI

contrast studies with small bowel follow through had been performed one month apart, the patient being treated expectantly in the meantime. Both studies had indicated the presence of a "fixated" bowel loop with limited peristalsis in the distal ileum. (Figure 1) While the findings were non-specific, mesenteric ischemia was a strong consideration. Infectious and granulomatous conditions were also considered in the differential diagnosis. A biplanar digital subtraction angiogram of the aorta with selective study of the celiac and superior mesenteric arteries was obtained. The inferior mesenteric artery could not be cannulated due to technical difficulties. This demonstrated wide patency of the mesenteric vessels, and the absence of any vascular patterns suggestive of neoplasia. A CT scan of the abdomen and pelvis with oral and intravenous contrast showed multiple dilated loops of small bowel with no evidence of mass lesion. Steroid therapy was instituted as a therapeutic trial for possible inflammatory bowel disease. The patient failed to improve, and his obstructive symptoms recurred each time he tried a regular solid diet. Since all clinical and radiological findings pointed to a refractory, incomplete small bowel obstruction, and the terminal ileum was the likely site of pathology, an exploratory laparotomy was performed.

OPERATIVE FINDINGS

At exploration, multiple areas of scarring were noted at the root of the mesentery with considerable foreshortening, and dense adhesions between the sigmoid mesocolon and the left leaf of the mesentery. Stellate, fibrotic areas were noted on the surface of the liver, and enlarged mesenteric lymph glands were present in the region of the ileum. A segment of the sub-terminal ileum about two feet proximal to the ileocecal valve and eight to ten centimeters long, demonstrated pathological thickening with luminal compromise. This loop

Figure 1



Upper GI contrast study showing aperistaltic loops of small bowel (indicated by the circle)

and the adjoining mesentery showed marked desmoplastic reaction. Intra-operative biopsy of the mesenteric nodes revealed metastatic carcinoid. The rest of the small and large bowels up to the peritoneal reflection in the rectum were normal, with no palpable masses and a pristine serosa. The appendix was vermiform in appearance and normal in feel.

According to the information gained so far, from operative findings and prior work up, it was felt that the primary tumor was most likely located in the pathological part of the ileum. This segment was resected and a stapled side-to-side anastomosis was made. Frozen section biopsies of the hepatic lesions failed to demonstrate carcinoid and revealed non-specific fibrotic changes. A more radical bowel resection or a right hemicolectomy was not undertaken in view of the diffuse involvement of the mesenteric nodes and the normal appearance of the colon.

SURGICAL PATHOLOGY

The terminal ileum showed marked fibrosis, but no evidence of a primary carcinoid tumor. Absence of hepatic metastases, and presence of carcinoid tumor in the resected mesenteric nodes were confirmed on permanent section. (Figure 2)

POST-OPERATIVE COURSE

Post-operatively the patient had an unremarkable recovery and became completely free of obstructive symptoms. Twenty-four hour 5-hydroxy-indole-acetic acid was found to be 5mg, which was within the reference range of 2mg – 15mg. An octreotide scan was performed three months following surgery. This detected increase uptake in the anterior, right side of the abdomen below the level of the right kidney at 24 hours. There was no evidence of distant metastases, but a primary or metastatic neuroendocrine tumor in the right colon was considered likely. A colonoscopy was undertaken which was normal. It may be noted

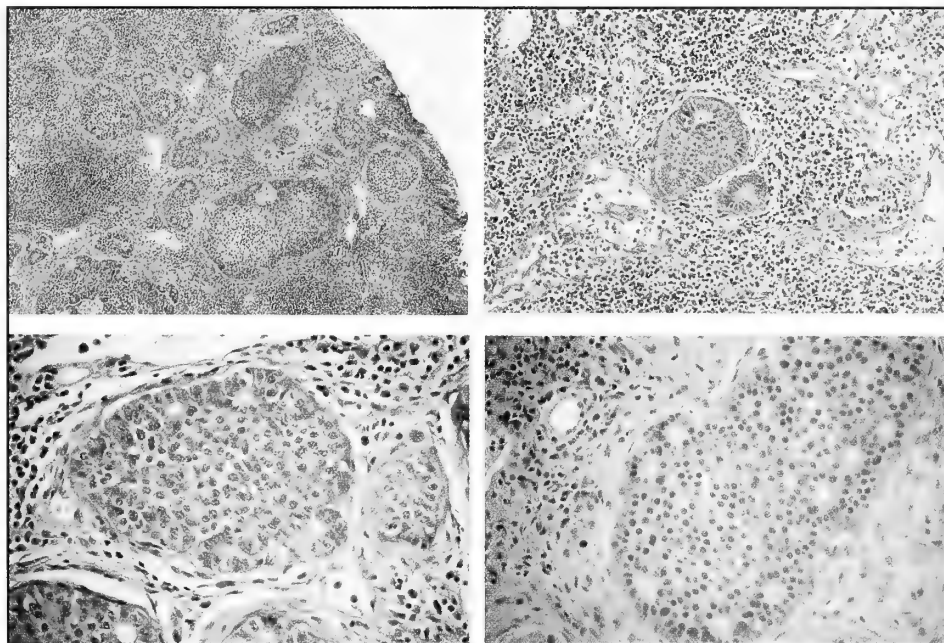
that a pre-operative colonoscopy was not performed as the patient had one less than a year ago.

Currently the patient continues to be in excellent health, and has no gastro-intestinal symptoms or any manifestations of Carcinoid Syndrome. It is quite obvious that we are dealing with a case of metastatic carcinoid in mesenteric nodes with no evidence of the primary site on standard work-up. Octreotide scan findings could indicate residual mesenteric nodes, or a yet undetected lesion. Further treatment for this patient presents the interesting question of whether there is any advantage in instituting systemic therapy.

DISCUSSION

The critical issue in the management of advanced carcinoid tumors has always been the preservation of quality of life and amelioration of symptoms. Although the literature has abundant references to the effect of systemic therapy in improving symptoms, prospective randomized trials evaluating their effect on survival are hard to find. This is mainly because of the characteristic indolent growth which makes survival a secondary consideration, and the relative rarity of the condition (1.5 per 100,000).¹ The patient presented here has a carcinoid tumor which has metastasized to mesenteric

Figure 2



Photomicrograph of mesenteric lymph node showing metastatic carcinoid.

Magnification:

Upper left x100

Lower left x400

Upper right x200

Lower right x400

nodes, and probably other locations, with an unknown primary site. He remains completely asymptomatic and continues to enjoy a normal lifestyle. This case thus constitutes a unique situation in which further treatment may not be beneficial and may even be harmful. Nevertheless, additional treatment is an important consideration in view of the known poor survival of those with metastatic disease versus localized, resectable tumor.² The concept of medical therapy to improve survival in an asymptomatic individual, though theoretically attractive, has little precedence in recorded literature.

The metastatic and invasive ability of carcinoid tumors is typically less aggressive than other carcinomas. As a result, many tumors are asymptomatic and not discovered until autopsy³ or during an unrelated operation. In one series only 30% were found to produce symptoms.² They nevertheless, have a wide spectrum of invasiveness which relates to variable symptoms and survival. Capella et al⁴ based their classification on site of origin, size, extensions, angio-invasion, biologic behavior, and histologic differentiation. This scheme includes all currently recognized prognostic factors. Histologic growth patterns have been grouped as A to D,⁵ or I to IV.⁶ Although these patterns predict survival they have not been shown to help determine the optimal therapy.⁷ Overall, the outcome and therapy in this motley group have been influenced by i) primary tumor location; ii) extent of local disease; iii) extent of metastatic disease; iv) presence or absence of hormonal activity; and, v) surgical resectability. Fifty percent of carcinoids in the gastrointestinal tract arise from the appendix, 25% from the small bowel, and 17% from the rectum.² In keeping with their variable aggressive potential, foregut carcinoids, arising from the ileum, demonstrate the propensity to metastasize in 35% of cases, while this is noted in only 3% of those in the rectum and appendix. Metastatic tumor in the liver, and those located in a bed of systemic venous drainage bypass the detoxification of the portal circuit and produce systemic effects of the secreted endocrine substances. This is known as the Carcinoid Syndrome and is an important factor to consider in formulating a treatment strategy.

Since these are slow growing neoplasms with overall 5-year survival rates exceeding 70% in most series, an aggressive surgical approach, both with curative and palliative intent, is advocated. Local excision is recommended for incidental tumors measuring less than 2cm in greatest dimension, with no muscular invasion or nodal spread. Curative resection should be carried out even in presence of liver metastases, for symptomatic or invasive tumors, and those larger than 2cm. Some experts recommend this approach even for

asymptomatic small intestinal tumors irrespective of size.⁸ Metastatic carcinoids which cannot be completely removed surgically merit radical palliative resection. Hepatic arterial embolization and dearterialization are considered when resection cannot be performed safely.⁸ Medical anti-proliferative strategies have been used in cases of disseminated disease. This includes chemotherapy, somatostatin analogs, and interferon alpha. Combined chemotherapy using Adriamycin has given response rates between 20% and 40%,⁷ while this was 33% with the combination of Streptozotocin and 5-FU.⁸ True tumor regression has not been proven, and unpleasant side effects have limited their use. Somatostatin analogs like octreotide represent the agent of choice in carcinoid syndrome,⁹ although different studies have reported conflicting results with respect to tumor shrinkage. Interferon alpha, alone and in combination with somatostatin, has produced excellent control of symptoms with response rates under 50%.⁹ Oberg and Eriksson¹⁰ demonstrated a superior survival rate with interferon relative to standard chemotherapy. A Norwegian study has documented enhancement of the effect of hepatic arterial embolization with the concurrent use of interferon.¹¹ Tumor targeted irradiation in the form of I131-MIBG (meta-iodo-benzyl-guanidine), and 90Y DOTA (tetra-azo-cyclo-dodecane-tetra-acetic acid)-octreotide are being developed.

CONCLUSION

Our experience from evaluation of the therapeutic options for this case revealed that treatment for metastatic carcinoids is mainly aimed at improving symptoms and controlling the tumor burden. Therapeutic options may entail aggressive surgical debulking, induction of hepatic ischemia, and anti-proliferative medical therapy. Marked difference in survival has been noted between patients with completely resected tumor versus those with residual disease. This prompted us to examine the possible benefits of instituting additional therapy in this case with the idea of maximizing his survival. However, reports regarding true tumor regression with these therapies are conflicting, and no true survival benefit has been established. Therefore, we deemed such treatment modalities inappropriate in our unusual patient who has proven metastatic carcinoid with no related symptoms.

AUTHORS

Scott Baker, MSIII. A third year medical student at the University of South Dakota School of Medicine in Vermillion. This manuscript was presented at the 1999 American College of Surgeons meeting. Mr. Baker was presented the C.B. McVay, MD, award.

Asish Mukherjee, MD. Assistant professor, Department of Surgery, University of South Dakota School of Medicine; Sioux Falls, SD.

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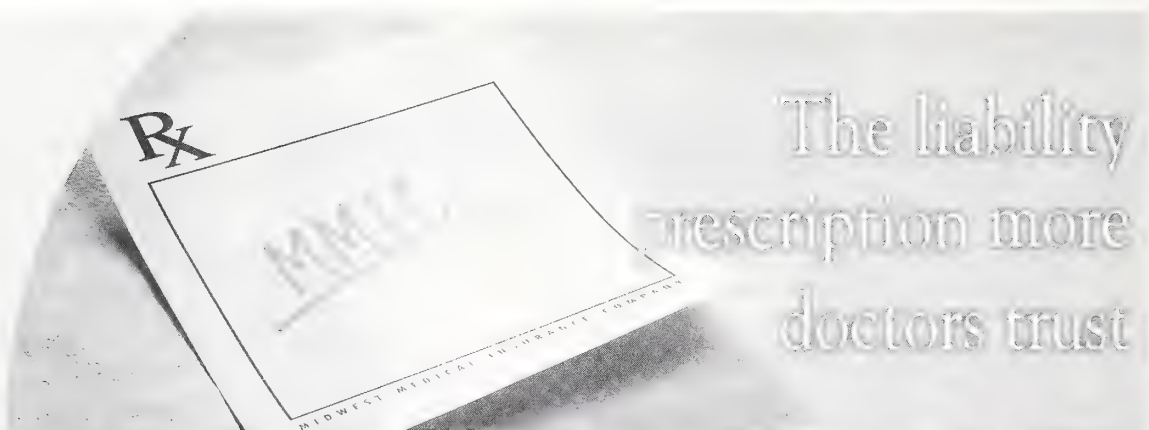
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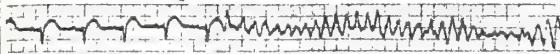


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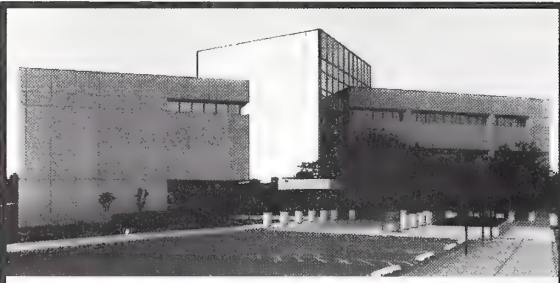
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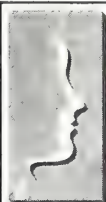
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Hospitals & Health System

CME Conferences

CME Conferences being held on a regular basis at various health care facilities throughout the state of South Dakota. (1 hour AMA Category credit available unless otherwise specified)

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced; Info: Sharon Sulzbach, 347-7145.

MARCH 2000

- Mar 15 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 15 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Mar 15 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 16 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 16 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Mar 16 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Mar 16 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 16 **USDSM Audio Conference** - 12:30 PM (CST)/11:30 AM (MST); Speaker: Charles S. Fuchs, MD; Topic: Topoisomerase I Inhibition - Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 17 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Mar 17 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Speaker: William M. Glazer MD; Topic: Can Tardive Dyskinesia be Eradicated? Info: Kate Naylor - 357-1585.
- Mar 18 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Mar 21 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Mar 21 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.
- Mar 21 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Mar 22 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 22 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 23 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 23 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Mar 23 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Mar 23 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Carlson Lecture in Pediatric Oncology; Info: Larry Wellman - 333-7178.
- Mar 23 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 23 **USDSM Audio Conference** - 1:30 PM (CST)/12:30 PM (MST); Speaker: Charles S. Fuchs, MD; Topic: Topoisomerase I Inhibition - Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 24 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Mar 24 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Mar 25 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Mar 27 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Mar 28 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Mar 28 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

- Mar 29 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Mar 29 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Mar 30 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Mar 30 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Mar 30 **USDSM Audio Conference** - 2:30 PM (CST)/1:30 PM (MST); Speaker: Charles S. Fuchs, MD; Topic: Topoisomerase 1 Inhibition - Colorectal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 30 **USDSM Audio Conference** - 2:00 PM (CST)/1:00 PM (MST); Speaker: Michael E. Thase, MD; Topic: Psychotic Depression; for more information on this series; contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 30 **USDSM Audio Conference** - 8:00 PM (CST)/7:00 PM (MST); Speaker: Anita H. Clayton, MD; Topic: Depression and Women; for more information on this series; contact Lynn Thomason at the Office of CME, 357-1480.
- Mar 31 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.

APRIL 2000

- Apr 1 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Apr 4 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Apr 4 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Apr 4 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: Michael E. Thase, MD; Topic: Psychotic Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 4 **USDSM Audio Conference** - 11:30 AM (CST)/10:30 AM (MST); Speaker: David Herman Ilson MD; Topic: Topoisomerase 1 Inhibition - Esophageal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 4 **USDSM Audio Conference** - 1:00 PM; (CST)/12:00 PM (MST); Speaker: Michael E. Thase, MD; Topic: Psychotic Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 4 **USDSM Audio Conference** - 7:00 PM (CST)/6:00 PM (MST); Speaker: Mark H. Rapaport, MD; Topic: Norepinephrine and Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 5 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Apr 5 **CPCWednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Apr 5 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Apr 5 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Apr 5 **Spine Grand Rounds** - 12:00 PM; Auditorium, Avera McKennan Hospital, third floor; Speaker: Aaron Kvistero PT & Brian Wienk PT; Topic: Trunk Stabilization for Low Back Pain; Info: Mary Sand, 339-6832.
- Apr 5 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: J. Craig Nelson, MD; Topic: Cases in Treatment Resistant Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 5 **USDSM Audio Conference** - 2:00 PM (CST)/1:00 PM (MST); Speaker: Anita H. Clayton, MD; Topic: Depression and Women; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 5 **USDSM Audio Conference** - 7:00 PM (CST)/6:00 PM (MST); Speaker: J. Craig Nelson, MD; Topic: Cases in Treatment Resistant Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 5 **USDSM Audio Conference** - 8:00 PM (CST)/7:00 PM (MST); Speaker: Alan F. Schatzberg, MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 6 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Apr 6 **Grand Rounds** - - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Apr 6 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Apr 6 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: J. Craig Nelson, MD; Topic: Cases in Treatment Resistant Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.

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- Apr 6 **USDSM Audio Conference** - 8:00 PM (CST)/7:00 PM (MST); Speaker: J. Craig Nelson, MD; Topic: Cases in Treatment Resistant Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 7 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Apr 7 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Apr 7 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Apr 8 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Apr 10 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Apr 10 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Apr 11 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Apr 11 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Apr 11 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Apr 11 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: Michael E. Thase, MD; Topic: Psychotic Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 11 **USDSM Audio Conference** - 12:00 PM (CST)/11:00 AM (MST); Speaker: Jack M. Gorman, MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 11 **USDSM Audio Conference** - - 12:30 PM; (CST)/11:30 AM (MST); Speaker: David Herman Ilson MD; Topic: Topoisomerase 1 Inhibition - Esophageal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 11 **USDSM Audio Conference** - 1:00 PM (CST)/12:00 PM (MST); Speaker: Mark H. Rapaport, MD; Topic: Norepinephrine and Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
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- Apr 12 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Apr 12 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Apr 12 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Apr 12 **USDSM Audio Conference** - 12:00 PM (CST)/11:00 AM (MST); Speaker: Jack M. Gorman, MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 12 **USDSM Audio Conference** - 7:00 PM (CST)/6:00 PM (MST); Speaker: Robert M.A. Hirschfeld, MD; Topic: Antidepressant Side Effect Management; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 12 **USDSM Audio Conference** - 9:00 PM (CST)/8:00 PM (MST); Speaker: Anita H. Clayton, MD; Topic: Depression and Women; for more information on this series; contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 13 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Apr 13 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Speaker: Tim Soundy MD; Topic: Eating Disorders in Adolescents; Info: Dr. Larry Wellman - 333-7178.
- Apr 13 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Apr 13 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: Robert M.A. Hirschfeld, MD; Topic: Antidepressant Side Effect Management; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 13 **USDSM Audio Conference** - 9:00 PM (CST)/8:00 PM (MST); Speaker: Alan F. Schatzberg, MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 14 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Apr 14 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Apr 15 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Aberdeen, SD

April 14, 2000

Cardiac Symposium and Medical Education Update

Technology, procedures and philosophies are constantly changing. In the medical field, it's vital to remain informed about the latest innovations. North Central Heart Institute and Avera St. Luke's are committed to providing that information.

Friday, April 14, 2000, we're pleased to present a symposium highlighting cardiac and internal medicine topics. The symposium will be held at the Ramkota Convention Center. CME credits can be acquired.

Topics Discussed

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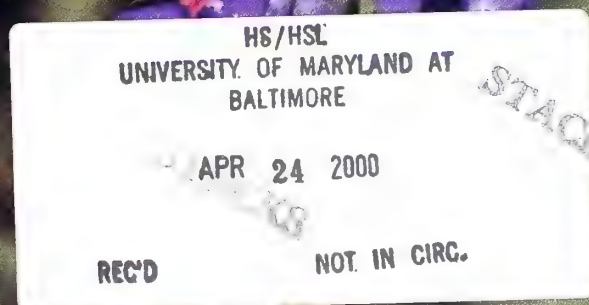
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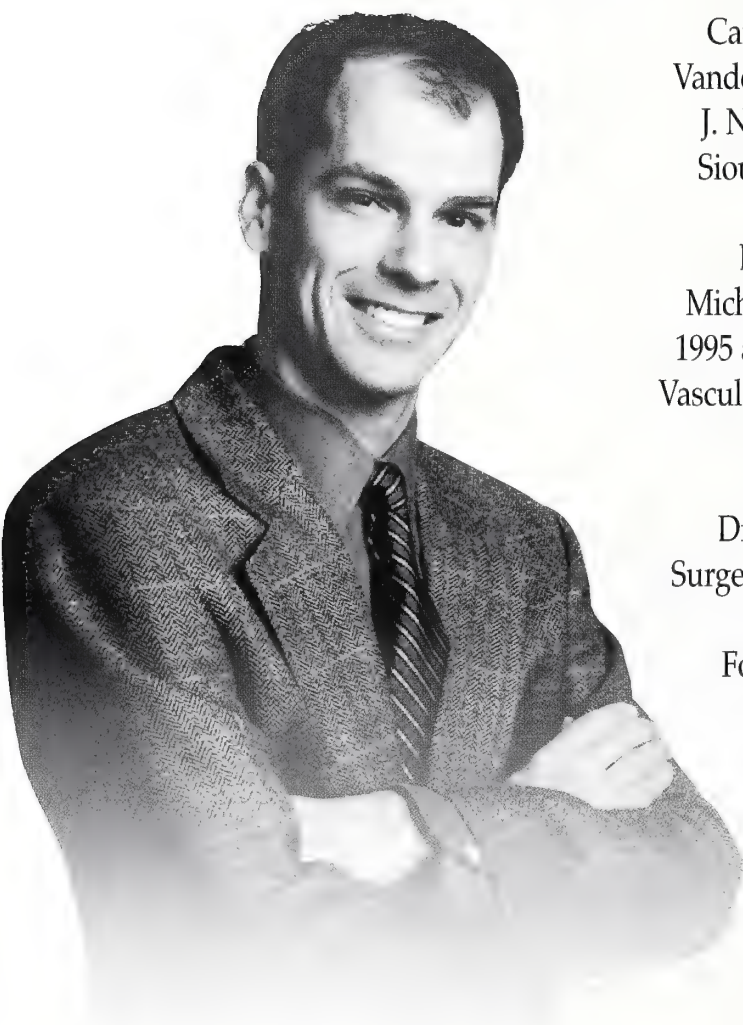
April 2000
Volume 53 Number 4

JOURNAL of MEDICINE

Published monthly by the South Dakota State Medical Association



Verlyn J. Nykamp, MD Joins the Heart Center



Cardiac, Thoracic & Vascular Surgery and Dr. John VanderWoude announce the association of Dr. Verlyn J. Nykamp. Their office is located on the campus of Sioux Valley Hospital & University Medical Center.

Dr. Nykamp completed his surgical residency at Michigan State University – Butterworth Hospital in 1995 and served his fellowship in Cardiothoracic and Vascular Surgery at the Texas Heart Institute, finishing in 1997. He has practiced at Siouxland Cardiac Surgeons in Sioux City, Iowa until recently.

Dr. Nykamp is certified by the American Board of Surgery and the American Board of Thoracic Surgery.

For more information or to make an appointment, call (605) 357-3800 or 1-888-269-3800.



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- Kevin Patrick, patient's father



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- Darryl Erlandson, patient's father

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By County for South Dakota, 1997-1998
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Following recommended mammography guidelines will reduce mortality rates by an estimated 30% - 13,000 American lives would be saved per year!

Happy Spring!

Gerald E. Tracy, MD
Medical Director

SOUTH DAKOTA JOURNAL OF MEDICINE

Volume 53/No. 4 April 2000

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About the Cover

This photo of a lovely flower was taken in San Antonio, Texas, by former South Dakota physician, Dr. Younes Bakri. Dr. Bakri now makes his home in San Marcos, Texas.

President's Page



K. Gene Koob, MD, President
South Dakota State Medical Association

Ethics-what does this bring to your mind? Is it the interaction you should have with drug companies, the relationship with those to whom you refer patients, or perhaps the confidence with which you keep your patients privacy? For me it is all of these and much more. It is the very essence of our professionalism. Dr. Anderson might ask, is it good medicine? I see this as a far deeper issue. It defines who and what we are. We use it every day and need to keep it in mind with each and every action. Do we all agree on each small part or individual action? I think not.

How do we deal with drug companies and their representatives with whom we deal on a daily basis? Certainly at one time there was an excess of financial incentives given to health care providers via drug company sponsored luxury trips thinly disguised as educational opportunities. That was during a time period when industries routinely used trips to influence anyone in society who might impact their profits. Those times are gone, as they well should be. However we are still presented with trips and stipends that stretch and break the bounds of the AMA's code of ethics.

What about the lunches served to physicians and their staffs. A modest meal with no other significant gifts is acceptable as long as some value will accrue to your patients, either by an increase in your skill levels, or products that will benefit them. Evening social gatherings with fine dining along with a medical presentation are acceptable in South Dakota, as long as the cost of the meal is still modest and, hopefully, the information gathered will benefit the patients. However, if one were to do this in an upscale eatery in most of our major cities, you would quickly surpass the recommended limit of \$100. Those trips where one is called a consultant and given an honorarium of hundreds of dollars or more are also unlikely to fit the guidelines. In general, you can't take money from any source unless you actually perform a service that would easily justify the remuneration. This includes hospitals, clinics, insurance companies, etc. In general a good rule of thumb is as follows, if you have a question or a concern, it probably won't fit the AMA guidelines.

Here's a tricky one. The next time you see a patient for more than a routine office visit, and include some type of procedure, look at your fees. Were they appropriate to the skill, energy, and time spent doing it? Let's make it harder. Ask a colleague in a different specialty his/her opinion. The next step is to check how much one of your patients was charged by one of your consulting physicians. Are the charges as you would expect? How would you feel if it came out of your pocket? I would hope that in general it wouldn't come as a shock to you. If it does, then what? Would you change your charge, contact the consultant, or just let it go? Now ethics start to get really tough. I have an opinion, but I don't have the answer. Perhaps the phrase, "Is it good medicine" comes into play here. Try that one out in the doctor's lounge and see what sort of response you get!

Don't forget the SDSMA annual meeting!



Ronda Stensland, President
South Dakota State Medical Association Alliance

I just spoke with Dr. Tom and Mollie O. Krafka and they informed me that there's "gold" in them there hills! Rapid City is having a **Gold Rush**. That's what they told me. It's true, no fooling! But before you would be prospectors climb on your mules and head for the hills, you'll need more information. So, I would like to take this golden opportunity to pass along the details of the **Gold Rush**.

The year 2000 marks the 50th anniversary of the AMA Foundation. To commemorate this "golden" anniversary, **Gold Rush** is the theme for this year's AMA Foundation event to be held in conjunction with the SDSMA/SDSMA-Alliance Annual Meeting at the Rushmore Plaza Holiday Inn in Rapid City June 7th-10th.

The Krafka's have graciously agreed to coordinate the June 8th evening event **Gold Rush for AMA Foundation**. **T.R.A.S.H.** (a.k.a. The Fools Gold "Dancers") will be entertaining us singing golden oldies. The highlight of the event will be the raffle drawing for a Gold 2000 Suburban valued at \$40,000.00 Now that's no small nugget! (A limited number of tickets will be sold at \$250 each. All raffle ticket proceeds benefit AMA Foundation.)

I am pleased to announce that for the fourth consecutive year, *The First National Bank in Sioux Falls* will be our host for the evening providing desserts, wine, and cordials. The Alliance is grateful for their sponsorship. (All event ticket proceeds benefit AMA Foundation.)

Dr. Tom and Mollie O. Krafka are right. Rapid City is having a **Gold Rush** on June 8th. For more information on how you can *stake your claim*, (purchase raffle and/or event tickets) please contact the SDSMA office at 605-336-1965. See you in Rapid City! Happy Trails to you.



In 1950 members of the AMA saw it as their responsibility to find ways to aid and support the medical education community. They wanted to ensure that nothing was done to compromise the quality of patient care and medical education in this country. For that reason, the AMA Board of Trustees chartered the Foundation to receive and distribute funds. Two years later, the AMA called upon the AMA Alliance to help ignite the fund raising process.

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We say "thank you" to the AMA Foundation and its continued effort to support and benefit the future physicians and medical professionals of South Dakota.



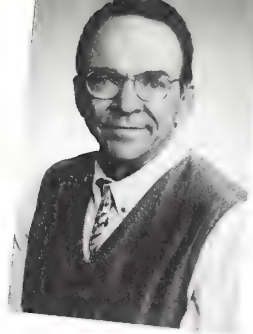
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Searching for Respite: Effective Pain Management

Prometheus, a prominent figure of ancient mythology, was well versed in pain. His ordeal is described in Aeschylus' play *Prometheus Bound* which ends with the stirring challenge to behold "how wickedly I suffer."¹ Prometheus' agony was manifestly unwarranted. He dared to thwart the ordained order by giving the gift of fire to humankind. This seemingly noble act so enraged Zeus that he had Prometheus chained to a rock every day. The tale of the manacled Prometheus certainly connotes pain, and his grim situation can serve as a symbolic parallel to the "wicked suffering" that so many people are forced to endure as part of illness and impending death.

And just as Prometheus did not seem to deserve his cruel fate, it is also true that patients do not warrant their suffering even when they have some complicity in their illness. Surely the 50 pack-a-year cigarette smoker with lung cancer has made bad choices, but does not thus deserve the withering pain of multiple bony metastases. This issue of blame is effectively addressed in Susan Sontag's seminal essay *Illness as Metaphor*.² Sontag stresses that illnesses, per se, should not connote special blame or evil. As an example, she points to the stigma that patients formerly felt when cancer was diagnosed. And certainly today there is considerable negativity associated with AIDS regardless of how it is contracted.

Not only should we not implicitly assign blame to patients for the myriad of conditions that cause pain, but as caregivers we should be deeply committed to aggressively and effectively relieving pain whenever possible. Indeed, such efforts can be some of the finest work we are privileged to do and can certainly earn us the heartfelt gratitude of patients and family.

Unfortunately, various factors can interfere with our mandate to work for pain relief. Sometimes we are skeptical of a report of pain if the patient does not visibly appear to be having significant discomfort. Experts in pain management stress that the patient's perception of pain should be taken at face value. Many hospitals now have patient graphic sheets that record pain as a "fifth vital sign." The argument is made that if a patient reports severe pain — for instance, eight on a scale of

10 — the pain should be presumed to be at that level and aggressively treated in appropriate fashion.

Other factors that can preclude effective management of pain include uncertainty about which analgesics to use and lack of familiarity with appropriate dosage schedules. Also, many caregivers continue to have great fear about contributing to patient addiction even though the risk of this is small when effective analgesia is used in appropriate settings. Certainly all caregivers have encountered patients who are blatantly "drug seeking." However, it is inaccurate and inappropriate to presume that most patients requiring pain medication are in this category. On the contrary, most patients who come under our care have legitimate and pressing needs for effective measures to ease their suffering. Our role as caregiver can be ennobled by our decisive interventions in this realm.

Oscar Wilde is said to have observed "the truth is never pure, and rarely simple." This adage can serve as a cautionary note for pain management, especially given the idiosyncrasies of patients' responses to treatment. Strategies that seem appropriate today include the following:

1. Meperidine should generally be avoided. When it is used in equivalent doses with morphine sulfate or hydromorphone it is not as effective. In addition, because a toxic metabolite can accumulate, more side effects occur, particularly in the elderly. Ironically, this agent has seemed to enjoy special favor among physicians in our region.
2. Propoxyphene, in doses ordinarily used, provides little pain relief. A local clinical pharmacologist recently noted to me that this drug is frequently used in a local emergency room setting. Despite its low potency, some patients certainly seem to benefit from propoxyphene as well as other drugs judged to be non-optimal. For decades preceding her death at 99, my sturdy grandmother was certain that nightly propoxyphene was the best way to combat her arthritis.
3. It is important to understand the pharmacology of opioid analgesics. For short acting agents, the

time to peak action with IV use is about 10 minutes, with peak analgesia within 20 to 30 minutes. With subcutaneous use, the onset of analgesia is generally between 15 to 30 minutes, with peak analgesia within 30 to 90 minutes. With oral usage, the onset of analgesia is 30 minutes, with peak effectiveness within 60 to 120 minutes. Once a steady state is achieved, parenteral dosing offers no advantage over the oral route for effective pain relief. Extended release opioid tablets can provide pain relief from 8 hours to 24 hours, depending on the formulation.

4. There are a wide variety of narcotic analgesics. It is generally advised that combination preparations having both agonist/antagonist properties not be employed. Drugs in this latter category include nalbuphine (Nubain) and pentazocine (Talwin). It makes sense to be familiar with a limited number of agents and use them with confidence. Examples could include short acting preparations like morphine immediate-release (MS IR), and oxycodone immediate-release (Oxy IR), and longer acting preparations (MS-Contin and Oxy-Contin). Another way to provide longer-term relief is with an analgesic patch such as fentanyl (Duragesic). A fentanyl patch should not be used for control of short-term, acute pain (such as in the post-operative setting).

5. Where a short acting preparation is used, it may take four to five half-lives to reach peak effectiveness. For severe, acute pain that is not relieved with an initial, immediate release form of morphine or oxycodone, the dosage can be increased with the second dose (e.g. moving from 5mg of Oxy IR to 10mg). The longer acting preparations (MS-Contin and Oxy-Contin) can be titrated every 24 to 36 hours after being initiated.

6. A sense for the equianalgesic doses of various agents is useful. While equivalencies are not exact, it is estimated that 5mg of morphine IV is comparable to 50mg of meperidine. With oral dosing, 15mg of morphine or oxycodone are comparable to 150mg of meperidine.

It is, of course, axiomatic that the type and amount of analgesia given to a patient must be tailored to the individual's specific medical condition. A single perfect drug or dosage does not exist. For my grandmother, propoxyphene was helpful. Occasionally, such a low potency drug may fit an individual patient's needs well. However, it cannot be routinely recommended for the management of significant pain.

The World Health Organization recommends a 0-10 scale that permits a ranking of pain as mild, moderate, or severe. Patients whose pain is in the 7-10 range are

considered to have severe pain. Presumably Prometheus would have fallen into this category. The ancient poet, Hesiod, notes of Prometheus:

"No rest, no sleep, no moment's respite.
Groans shall your speech be,
Lamentation your only words."³

In dealing with a patient in severe pain, most experts would stress the need to quickly employ appropriate doses of opioids rather than using less aggressive agents such as acetaminophen, NSAIDs or codeine. As a hypothetical example, a 70 kilogram patient in extreme pain might be given 5mg of morphine IV. If initial relief is achieved, an oral preparation of morphine or oxycodone immediate-release could be started within several hours — for instance, 15mg of MS-IR or Oxy-IR. This dose could be repeated every 3 to 5 hours. While a steady state would not be reached for 4 or 5 doses, one could incrementally increase the dose during the first 24 hours if the severity of pain warrants it. Once pain is under reasonable control, a longer acting preparation (MS-Contin or Oxy-Contin) could be initiated. With any opioid, nausea may be a problem and such drugs as compazine, droperidol, or trimethobenzamide may be helpful.

As caregivers, we want to be competent and compassionate. Much of what we do involves aggressive diagnostic and therapeutic intervention. However, it is critically important for us to be knowledgeable about the basics of pain management and to recognize how fundamental this is to what we offer our patients. The attempt to relieve pain is noble but, of course, it cannot guarantee that patients will cease to suffer. Caregivers also have to try to assist patients with the anguish of dealing with a bad prognosis and the attendant disruptions in their lives. While Prometheus clearly endured pain, he also presumably experienced suffering at the indignity and unfairness of his situation. As caregivers, there are unfortunately many situations that we cannot totally remedy. We are, however, given the power to intervene, and, frequently, to make things better for patients. We should feel both challenged and ennobled to wage the battle for pain control.

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Jerome W. Freeman, MD
Editor

Steps Forward And Backward Within The Fluoroquinolone Class

Dennis D. Hedge, PharmD; Sioux Falls, SD

Over the past several months, the fluoroquinolone antibiotics have been a focus of attention by the medical press. The fluoroquinolone antibiotic trovafloxacin (Trovan) was found to be associated with rare, but fatal, cases of liver toxicity. During the 18-month period following FDA approval of the drug, 140 cases of severe liver toxicity (including 14 cases of acute liver failure) were reported among the 2.5 million prescriptions for trovafloxacin. As a result of these findings, the FDA recommended that trovafloxacin be used only for life-threatening infections in hospitalized patients and that treatment be no longer than 14 days. In a separate FDA action, the fluoroquinolone grepafloxacin (Raxar) was removed from the market as well due to the potential of inducing life-threatening arrhythmias secondary to prolongation of the QT interval in patients receiving the drug.

At the time of their FDA approvals, both grepafloxacin and trovafloxacin were very welcome additions to the antimicrobial armamentarium because of their enhanced activity against *Streptococcus pneumoniae* as compared to other available fluoroquinolones. This feature was extremely attractive due to the steady increases in multiple-antibiotic-resistant *Streptococcus pneumoniae* in many communities. Recently, two new fluoroquinolone antibiotics with enhanced activity against *Streptococcus pneumoniae* were approved by the FDA and made available for use. Not surprisingly, the recent FDA actions on trovafloxacin and grepafloxacin have prompted many to take a more in-depth look at these agents upon their entry into the marketplace.

Moxifloxacin (Avelox) is a drug manufactured by Bayer Pharmaceuticals and is indicated for treating adults with acute bacterial sinusitis, acute exacerbations of chronic bronchitis, and mild or moderate community-acquired pneumonia. Moxifloxacin, like other fluoroquinolone antibiotics, is well absorbed from the gastrointestinal tract. This agent does undergo some hepatic metabolism and has an elimination half-life of about 12 hours. Even though moxifloxacin is partially metabolized by the liver, it is important to note that the drug does not possess the same chemical side-chain that is suspected to play a key role in the development of

hepatotoxicity with trovafloxacin. Adverse effects that have been associated with moxifloxacin include nausea, diarrhea, dizziness, and potential to prolong the QT interval in certain patients. Due to the potential to prolong the QT interval, the manufacturer advises caution if moxifloxacin is given concurrently with other drugs that can prolong the QT interval. The manufacturer also recommends that moxifloxacin not be prescribed for patients taking Class IA or Class III antiarrhythmic agents, patients with hypokalemia, or patients with known prolongation of the QT interval.

Gatifloxacin (Tequin), the other newly approved fluoroquinolone antimicrobial, is manufactured by Bristol-Myers Squibb. Gatifloxacin is indicated for acute bacterial exacerbations of chronic bronchitis, acute sinusitis, community-acquired pneumonia, complicated or uncomplicated urinary tract infections, pyelonephritis caused by *E.coli*, uncomplicated urethral and cervical gonorrhea, and acute uncomplicated *Neisseria gonorrhoeae* rectal infections in women. The adverse effect profile for gatifloxacin includes nausea, vaginitis, diarrhea, headache, and dizziness. In addition, gatifloxacin also carries warnings about the potential for QT prolongation, similar to other fluoroquinolones.

Gatifloxacin's pharmacokinetic profile reveals that it undergoes very little hepatic metabolism and is primarily excreted unchanged in the urine. This agent, like other fluoroquinolones, also has excellent oral bioavailability. Considering the excellent bioavailability, it is not surprising that bioequivalence has been demonstrated between the oral and IV formulations of gatifloxacin, resulting in the potential to reduce patient care costs by administering gatifloxacin orally when clinically possible.

Structurally, these quinolones have a methyl/methoxy group at position 8 of the quinolone structure. This is an important feature because it has been shown that when a quinolone possesses this type of modification, two mutations are required for resistance to occur, making resistance development less likely¹. This is very attractive since the number of community-acquired infections caused by resistant pathogens continues to rise².

Recent antimicrobial susceptibility test data demonstrate that the newer-generation quinolones are effective against several pathogens resistant to other antimicrobials (e.g. penicillin-resistant pneumococcus). With this in mind, it would seem that these quinolones are bound to play an important role in the future treatment of infectious diseases. At this time, many are also optimistic that resistance development to these quinolones will be slow to develop due to the presence of the methyl/methoxy group at position 8 of the quinolone structure. The only way we will know for sure, however, is to monitor future susceptibility trends. Stay tuned!

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Adaptation To Childhood Parental Loss: The Experience Of Growing Up In An “Orphanage” And Its Meaning Over Time

Judith Batchelor, MSW, PhD

ABSTRACT

Intrigued by a newspaper ad in the *Argus Leader*, placed by The Sioux Falls Children's Home Society in their hope of reuniting adults formerly institutionalized there as children, I wondered what we might learn from the experiences of people having grown up as “orphans.” After exploration, I was invited to attend their reunion to facilitate some of the discussion of former residents who were “welcomed home” from various parts of the country. The participants expressed a wide range of emotions as they rediscovered one another - sometimes from childhood memory, sometimes contrasting childhood faces in old photos with the faces of people now present in middle or old age. As the group reminisced, one man told of his calling out the home's upper-story window each evening to his older sister who lived a floor below. He recalled his sadness on the day when there was silence in response, as she had been sent to a foster home. A woman “alumni” sang word for word, with others joining in, an old Christian hymn that they had sung decades before. And, an elderly woman described how the church across the street from the original children's home facility on tenth street, had a large stain glass window depicting the outstretched arms of God. She told how every night, when it was time for her to go to bed, the window would be lit up. Movingly, she related how she would lie in her bed and look through the window of her room, feeling “held” until she fell asleep. Over the many months that followed, men and women who had been institutionalized there throughout childhood entrusted to me their life stories. This article is a summary of their narratives. In general, it seemed that the participants were set apart by the enormity of the poverty of their early years, the enduring quality of their losses, and by a certain tenacity, decency, and striving for restoration.

INTRODUCTION

Institutional care for children has a long and complex history closely paralleling the social and philosophical values of society as a whole. Ideologies regarding the collective care of children and the effect of their separation from families have been guided over time by historical events, political reforms, humanitarian values, and principles of planned social care. One of the earliest accounts in the literature presents a striking example of one context in which the “care” of dependent children took place. In order to ostensibly ensure the anonymity of the parent or caretaker, the Hospital of the Holy Spirit in Rome was equipped with a revolving box called the “torno.” This turnstile type box, which was a carved niche in a monastery wall, allowed for the abandonment of infants and small children up to a certain size under cover of darkness. While the use of

the torno diminished - it was last reportedly used in 1939 in an orphanage in Warsaw¹ and in 1952 in Cuba² - today, as a metaphor, it may well describe some of our approaches to child welfare.

Throughout time, novels, plays, and films have intrigued audiences by portraying the orphan as a complex and mysterious character. Some writers have described the orphan in heroic proportions, functioning beyond the usual constraints and limits imposed by parents and being open to limitless possibility. Peter Pan, the child who refused to grow up, lived out enchanting adventures with pirates and sparkling fairies, and Tarzan, the child of nature, lived without fear insolidarity with jungle animals. But other images from literature, (e.g., Defoe's *Moll Flanders* or Fielding's *Tom Jones*), have presented a contrasting view of the orphan experience, one in which character and destiny,

formed in the midst of deprivation, result in notorious behavior.

Often the myths underlying such characterizations of orphans, especially those having to do with their invulnerability, can be attributed to our own desire for immortality or protection against danger and misfortune. Likewise, much of the ideology surrounding "unlimited opportunity" or the "self-made man" seems to have more political than actual value, especially from the standpoint of children growing up amid deprivation and abuse. Although such concepts have provided an incentive to some, to many they must be a source of considerable self-doubt, confusion, and guilt.

In recent years, although research has more generally acknowledged the complexity and individual variation of childhood adaptations to loss and adversity, with most agreeing that invulnerability is "a partial and dynamically changeable state in constant interaction with a changing environment,"³ interest in the separation experiences of children in care and their means of coping has declined. Some of this decline has been due to those who have disputed the lasting effects of early separation and have indicated that childhood loss appears less significant for the individual than the adverse context of family dysfunction and maltreatment in which separation or losses occur.⁴ While the effects of parental loss and family context are difficult to isolate, internal representations of these experiences can provide valuable information as to what adaptations occur and how we might more fully understand some of their consequences.

FINDINGS

The following findings are part of a more detailed clinical study of a small group of individuals who confided the details of their life stories. When adults recall childhood memories, the truth of these accounts is necessarily subjective. While I cannot attest to the authenticity of their recollections, I do affirm their importance for the speakers.

This exploration yielded extensive clinical data attesting to the complexity and uneven quality of the participants' development and life course. Most remarkable, both individually and collectively, seemed the often poignant interweaving of determination, durability, and yearning for love.

Trauma and Grief

All of the individuals interviewed reported significant childhood trauma prior to their institutional placements. Some witnessed multiple episodes of family violence; others recalled their helplessness in attempting to provide care for critically ill and dying parents. Most were overwhelmed with the circumstances surrounding their families' poverty, their

experience of hunger, and their need to manage the care of younger siblings. One woman said that her family had lived for over a year in the back of a semi-truck; a man told of his being "dropped off" at the home at age three.

Although it has long been appreciated that children are particularly vulnerable when confronted with parental loss, the dual tasks of trauma mastery and grief resolution have been, for the most part, given independent consideration within the literature. The complex interplay of both processes would, from the exploration of these participants' narratives, suggest important areas of clinical intervention and prevention. While on the one hand there is considerable evidence that young children frequently use denial or reversal in the face of loss,⁵ it seems, on the other, that the added burdens associated with specific circumstances of death (e.g., intrusive imagery associated with child witness to death or violence) appeared for the majority of these participants to be associated with trauma, increasing the likelihood of their use of denial or dissociation as an adaptation.⁶ These constitute specific interferences with identification (e.g., in cases of parental death) and developmental progression, as well as with the resolution of grief and mourning.

Attention to post-traumatic stress syndrome and the demands for brief technique-oriented intervention have tended to shift current programming and treatment in the direction of the psychological effects of maltreatment (i.e., sexual, physical or emotional abuse) that often precipitate child placement. Vital as these concerns and treatments are, they tend to neglect the child's reaction to the disruption of family ties, developmental processes, and many of the internal dynamics associated with separation and loss. Consideration of both trauma mastery and adaptations to loss allows us to more fully explain the importance of some of the participants' disruptive experiences during their development. This seemed particularly true for female participants during puberty when it seemed as though they were additionally burdened with identifications that carried the threat of death itself.⁷ This was expressed most clearly by a woman who spoke of a persistent, intense fear throughout childhood and into her adult life of dying "like my mother." The onset of menses or the appearance of the "sight of blood" appeared to be an unusually disruptive experience. For example, one woman recalled, "I fainted." Another stated, "It scared me; then I knew it was a change in me. I never wanted to grow up." Another reported, "I really thought I was dying or something."

In addition, consideration of this interplay contributes to a more complete understanding of reparative pathways and children's coping responses. For example, a woman who recalled a childhood filled

with fears associated with traumatic imagery involving her mother's illness and death was also able to maintain an important connection to a soothing maternal image. She described the traumatic loss of her mother and the poignant reappearance of her in her inner world:

"I used to always have a dream. In the dream I was lying on the bed in our house. My mother kissed me to wake me up and tell me it was time for dinner. It was a comfortable feeling. For many years I would think about that. I'd wake up and wish that I was still dreaming...that my life in the home was a dream and that I would wake up...that my mother never died...that all these years didn't really happen."

This self soothing image seemed to have played an important role in her struggle to maintain psychological integrity under conditions which might otherwise have been overwhelming.

Restorative Strivings

While participants who experienced institutionalization and loss due to the death of a parent appeared to differ in their mourning process over time from those who experienced prolonged separation from living parents, all expressed memories of staff or teachers that depicted poignant strivings to obtain or replicate parental love. They recalled actively seeking out those adults who offered them an opportunity to feel special and provided them with small privileges, rewards and protection. Some appeared to have what Erikson⁸ referred to as more "sending power," and were able to attract adults with a fair amount of ease. Others were more reticent and "tried to be of assistance" by meeting the needs of others; for example, one woman stated,

"I always tried to be of assistance.... To get attention, you had to either be bad or good, and I always tried to be good. I always offered to help with ironing and doing chores,...sewing. I always wanted to be helpful, ...whatever I could do to help."

Another woman recalled how she longed to be the matron's "pet," because "I always wanted to be close to someone, and the few times that she did a few things, it always felt so good, because I thought,...oh she really likes me; I'm getting to be her pet. But, I don't think I ever was."

In an environment where parental substitutes appeared scarce and limited in their availability, these individuals seemed to have been active and resourceful in extracting bits and pieces of what they needed from their relational worlds. This ability to search out and

make use of others in often the most ungriving of circumstances⁹ seemed striking. It seemed to have particular significance in considering what appeared to account for differences between participants who expressed felt rejection from living parents and those who were institutionalized due to the death of one parent. Those experiencing rejection seemingly had few benign inner-world resources to draw on, and it appeared as though detachment and withdrawal represented an adaptive and necessary compromise. In one case, archival data in the form of childhood letters provided testimony to the fact that longings and hope for reciprocal love were in latency given fuller expression, but that the capacity for hope and trust diminished, most assuredly by adolescence, when returning to an unprotected environment seemed to have recapitulated a sense of betrayal.

A Primary Preoccupation

In the context of their personal narrative, even though each of the participants presented many and varied responses to being separated from their parents and institutionalized throughout childhood, there appeared to be a primary preoccupation, a recurring, continuous theme around which relationships, adaptational strategies, and psychological capacities tended to be organized, colored, and shaped. These were associated with each individual's understandings of the meaning of his or her losses. Some of the idiosyncratic themes were, for example, voiced in repeated expressions of hope for reconciliation and the wish to have severed connections restored, (as told by a woman who, as an eight year old girl, was separated from her parents and three sisters until middle age.) An elderly woman who was removed from an abusive home spoke of her life-long longings to feeling human and be normal, "I wanted to be normal; I had to be normal." Another person reported an understandable and persistent want to be nurtured and protected, and one man who knew so little about his parents, pursued his desire to know and be known.

Narrative data provided evidence of unresolved losses that also involve significant amounts of conflict. Over time participants repeated with others relationship patterns that were consistent with one aspect or another of their individual preoccupations. This was particularly evident in early marital relationships; it also contributed to dynamics associated with the transgenerational transmission of poverty.

In this latter regard, it appeared in general that participants eventually were able to engage in relationships that were less repetitious. Over time participants made gains in self-esteem and self-assurance, often after leaving a troubled relationship and/or establishing a more satisfying one. For these participants, although early tragedy seemed to have

recapitulated itself in adolescence and/or in early, unstable, and sometimes abusive marriages, loss and adversity did not seem to invariably result in pain-filled relational choices throughout the entirety of the life course.

It is interesting to consider to what extent such “factors” as the participants’ active relation-seeking in their early years might offer insight into adaptive relation-seeking in later life. Perhaps something of the participants’ ability, within the context of extreme deprivation, to search out and use whatever bits and pieces of internalizations that were crucial for adaptation in childhood, has contributed to their capacity to do so even more competently as adults.

Others have written about certain self-righting capacities, as well as a quality of resilience that signifies a potential for growth in later life relationships.¹⁰ Associated with this are findings by J. Wallerstein¹¹ linking childhood adversity with successful “rescue marriages.”

Faith and Hope

The children’s home included daily religious observances and practices (e.g., reading of Bible stories, recitation of morning and evening prayers, and gathering for singing religious hymns). It is from within this context that those interviewed expressed many vivid memories and reported the religious training they received in the institution as most sustaining to them in their efforts to mediate the pain of loss. In general, it seems the participants were able to acquire or maintain through religious traditions and beliefs some of the belonging, sense of hope, and life-continuity that was otherwise so painfully absent. Their God representations¹² reflected parental longing, hopes for rebirth in the next life, and a sense of belonging. For example, religious representations for one man seemed to embody the essence of his struggle for a “better place” in which he hoped to be forgiven and be able to reconcile betrayal and abandonment. “My God is one that I can count on, ...who won’t walk away ...or forsake me.” This he expressed while simultaneously stating his ongoing concern that he might again be abandoned, and that “we do things that are not right and we have to suffer the consequences.”

Constructive Competencies

A consistent related theme among the participants involved their value of order and their persistence in areas of work and academic competence. They seemed especially adaptive in these capacities, being able to consistently and impressively draw from them for the regulation of self esteem and the maintenance of psychological equilibrium over the course of life. One woman recalled some of her experience upon entering the children’s home with the following words:

“...going to the orphanage, then ...I go to work. I find out what dusting is, and I find out what laundry is and ironing and taking baths. You know we never did that at home. That to me was right; it felt right to me. Just being in the home.... I guess when I learned that stuff, I had enough smarts to know that this is what I want and I don’t want to live like I was living. I knew that wasn’t right. So it is something I wanted for myself.”

Such capacities seemed determined by many factors. They appeared, for example, to reflect the participants’ internalization of the children’s home’s values and its work ethic. This seemed to be somewhat synchronized with the culture-at-large in keeping with historical trends of the post war era.¹³ As a group the participants seem to have found the home’s task orientation and emphasis on regimentation and order a safe and reliable alternative to the internal and external threat of disorganization surrounding their young lives. While participants undoubtedly experienced a degree of safety and security in the institution’s regimentation and order, they also seemed compelled by false self-compliance¹⁴ and the need for rigid control of affects.

SUMMARY

Viewing the interplay of complex internal and external dynamics and processes in these participants over time challenges us to consider not only how individuals adapt and develop in a context of adversity, but also how our social welfare policies and treatments might, in turn, be less effective when we view adaptation from a fixed, unitary, or linear point of view. From an integrated perspective we might consider more fully how, in our own historical era, philosophical and social values associated with efficiency and expediency have become embedded within Child Welfare practices, ultimately diminishing some of the protection and care children in trouble need.

Understanding the strengths and assets of persons who grow up amid adversity holds great promise for prevention. Nevertheless, such undertakings need not represent the equivalent of medical immunology. Vaillant and Felsman,¹⁵ in their longitudinal work documenting the forty years of individual struggle of the men comprising the Core City sample, aptly report the following regarding invulnerability:

“In the myth, Achilles was rendered invulnerable by a moment’s immersion in a magic bath, but myths are poor science. If the term ‘invulnerability’ is to be useful, it must be a metaphor for a lifelong process of adaptation. The study of high-risk children necessitates an

interactionist effort. Disciplined attention must be given to the unique matrix of internal and external factors at work in the individual child.”

Applicable to this, based on descriptive, behavioral, or cognitive measures, this group of participants, in their childhoods, would have demonstrated a fair amount of proficiency. Most seemed not to outwardly exhibit major symptomatology. They performed reasonably well in school, participated in social and athletic activities, and in general seemed not to have displayed overt behavioral disorders.

Their accomplishments to a significant degree attest to the strength of children’s motivations to complete development,¹⁶ even when faced with multiple trauma and loss. Even though their achievements on this level are remarkable and over time have sustained them in their efforts to lead more normal lives, it is obvious from their narrative histories that internally they have experienced great sorrow and suffered multiple fears and conflicts. The losses occurring so long ago have continued to reverberate deeply throughout their lives. This can be stated without minimizing the significance of their accomplishments or overemphasizing the pathological, but with a better sense of how they variously adapted to much internal and external poverty.

There are important consequences when children are left alone to make their own meanings, deal with sudden shock, and form identities amid isolation and confusion. The participants’ losses diminished their sense of safety and their freedom to fully explore their inner worlds. It affected how deeply they were able to experience capacities for hope or trust and be able to enter into intimate relationships with others. We must ask ourselves to what extent we value the inner voices of poor children or are prepared to more fully consider their futures.

* Judith Batchelor is a clinical social worker in private practice in Sioux Falls, South Dakota. This article summarizes a previously published study completed as part of her doctoral work at Smith College, Northampton, Massachusetts. Although identifying information has been omitted, the narrative data and verbatim quotations cited within this article are being provided with the informed consent of the persons interviewed.

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Dr. Talley serves as the Dean of the University of South Dakota School of Medicine and Vice President of Health Affairs for the University of South Dakota. He was chair of the USD SM Department of Internal Medicine from 1975 to 1987, and was a member of the founding committee of the Medical Service Plan, the predecessor of University Physicians. At the national level, Dr. Talley is a member of the Liaison Committee on Medical Education, which accredits 125 undergraduate medical education programs in the United States. He served as chair of the American Medical Association Section on Medical Schools and chair of the National Board of Medical Examiners. He is an ongoing volunteer for the American Heart Association.

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Gifts To Physicians From Industry

Addendum to the AMA Code of Medical Ethics

Introduction: Mary S. Carpenter, MD, and James A. Engelbrecht, MD

In the learned profession of medicine, every physician is held to a set of ethical standards. The ethical guidelines by which we hold ourselves accountable are clearly written in the Code of Medical Ethics developed and published by the American Medical Association. This document, which is the foundation on which our professional and personal lives are built, is a dynamic set of guidelines. Developed and modified, expanded and refined, it is a product of the Council on Ethical and Judicial Affairs (CEJA) of the AMA which has been developed over many decades.

One of the more recent additions to the Code of Medical Ethics originally written in 1991 is Opinion 8.061 "Gifts to Physicians from Industry." In an addendum to that opinion in 1992 a "clarification" was published. In the past few years there has been renewed activity by industry in the area of gifts to physicians. The AMA feels that this is an appropriate time for encouraging physicians to review these opinions. As your representatives to the AMA, we felt this information was important enough to the physicians of South Dakota that the opinion should be published in its entirety. In a recent letter Herbert Rakatansky, MD, Chairman of CEJA writes, "We are concerned with what appears to be escalation over the past few years of inappropriate gifts. The issue seems, in large part, to be lack of education of both physicians and industry. These guidelines are set out so a patient can trust that a physician's recommendation is based only on the patient's best interests. Moreover, the guidelines are designed to minimize the amount of money spent on gifts - money that could be better spent on research or on alleviating the high cost of prescription drugs. We must take the initiative to self-regulate in order to reduce potential conflicts of interest, thus maintaining professionalism in medicine and avoiding renewed interest by the federal government."

The CEJA guidelines apply both to gifts to physicians from industry and to entertainment sponsored by industry as part of an educational conference. All gifts must entail a benefit to the patient and not be of substantial value (interpreted as < \$100). Industry sponsored entertainment that is part of an educational conference is appropriate if: a) it is of modest value; b) facilitates discussion among attendees and faculty; and c) the educational part of the conference accounts for a substantial majority of the time.

We would encourage you to review Opinion 8.061 and the clarification. If there are areas that need further elucidation we would be pleased to submit any questions to CEJA on your behalf. This would include not only questions or concerns, but also any opinions or recommendations for changes that you might deem appropriate. Queries can be sent directly to CEJA, or if there are more substantive changes that should be discussed, certainly a resolution can be developed and submitted to the AMA House of Delegates for discussion and recommendation to CEJA.

James A. Engelbrecht, MD, Delegate

Mary S. Carpenter, MD, Alternate Delegate

E-8.061 Gifts to Physicians from Industry.

Many gifts given to physicians by companies in the pharmaceutical, device, and medical equipment industries serve an important and socially beneficial function. For example, companies have long provided funds for educational seminars and conferences. However, there has been growing concern about certain gifts from industry to physicians. Some gifts that reflect customary practices of industry may not be consistent with the Principles of Medical Ethics. To avoid the

acceptance of inappropriate gifts; physicians should observe the following guidelines:

- (1) Any gifts accepted by physicians individually should primarily entail a benefit to patients and should not be of substantial value. Accordingly, textbooks, modest meals, and other gifts are appropriate if they serve a genuine educational function. Cash payments should not be accepted. The use of drug samples for personal or family use is permissible as long as these practices do not

interfere with patient access to drug samples. It would not be acceptable for non-retired physicians to request free pharmaceuticals for personal use or use by family members.

- (2) Individual gifts of minimal value are permissible as long as the gifts are related to the physician's work, (e.g., pens and notepads).
- (3) The Council on Ethical and Judicial Affairs defines a legitimate "conference or meeting" as any activity, held at an appropriate location where, (a) the gathering is primarily dedicated, in both time and effort, to promoting objective scientific and educational activities and discourse (one or more educational presentation(s) should be the highlight of the gathering, and (b) the main incentive for bringing attendees together is to further their knowledge on the topic(s) being presented. An appropriate disclosure of financial support or conflict of interest should be made.
- (4) Subsidies to underwrite the costs of continuing medical education conferences or professional meetings can contribute to the improvement of patient care and therefore are permissible. Since the giving of a subsidy directly to a physician by a company's representative may create a relationship that could influence the use of the company's products, any subsidy should be accepted by the conference's sponsor who in turn can use the money to reduce the conference's registration fee. Payments to defray the costs of a conference should not be accepted directly from the company by the physicians attending the conference.
- (5) Subsidies from industry should not be accepted directly or indirectly to pay for the costs of travel, lodging, or other personal expenses of physicians attending conferences or meetings, nor should subsidies be accepted to compensate for the physicians' time. Subsidies for hospitality should not be accepted outside of modest meals or social events held as a part of a conference or meeting. It is appropriate for faculty at conferences or meetings to accept reasonable honoraria and to accept reimbursement for reasonable travel, lodging, and meal expenses. It is also appropriate for consultants who provide genuine services to receive reasonable compensation and to accept reimbursement for reasonable travel, lodging, and meal expenses. Token consulting or advisory arrangements cannot be used to justify the compensation of physicians for their time or their travel lodging, and other out-of-pocket expenses.³
- (6) Scholarship or other special funds to permit medical students, residents, and fellows to attend carefully selected educational conferences may be

permissible as long as the selection of students, residents, or fellows who will receive the funds is made by the academic or training institution. Carefully selected educational conferences are generally defined as the major educational, scientific, or policymaking meetings of national, regional, or specialty medical associations.

- (7) No gifts should be accepted if there are strings attached. For example, physicians should not accept gifts if they are given in relation to the physician's prescribing practices. In addition, when companies underwrite medical conferences or lectures other than their own, responsibility for, and control over the selection of content, faculty, educational methods, and materials should belong to the organizers of the conferences or lectures. Issued December 1990, with companion report "Gifts to Physicians from Industry." Updated June 1996. (II)

E- Addendum II. Council on Ethical and Judicial Affairs Clarification of Gifts to Physicians from Industry (E-8.061).

General Questions:

- (a) Do the guidelines apply only to pharmaceutical, device, and equipment manufacturers?
"Industry" includes all "proprietary health-related entities that might create a conflict of interest," as recommended by the American Academy of Family Physicians.

Guideline 1:

Any gifts accepted by physicians individually should primarily entail a benefit to patients and should not be of substantial value. Accordingly, textbooks, modest meals and other gifts are appropriate if they serve a genuine educational function. Cash payments should not be accepted.

- (a) May physicians accept gram stain test kits, stethoscopes or other diagnostic equipment?

Diagnostic equipment primarily benefits the patient. Hence, such gifts are permissible as long as they are not of substantial value. In considering the value of the gift, the relevant measure is not the cost to the company of providing the gift. Rather, the relevant measure is the cost to the physician if the physician purchased the gift on the open market.

- (b) May companies invite physicians to a dinner with a speaker and donate \$100 to a charity or medical school on behalf of the physician?

There are positive aspects to the proposal. The donations would be used for a worthy cause, and the physicians would receive important information

about patient care. There is a direct personal benefit to the physician as well, however. An organization that is important to the physician - and one that the physician might have ordinarily felt obligated to make a contribution to - receives financial support as a result of the physician's decision to attend the meeting. On balance, physicians should make their own judgment about these inducements. If the charity is predetermined without the physician's input, there would seem to be little problem with the arrangement

- (c) May contributions to a professional society's general fund be accepted from industry?

The guidelines are designed to deal with gifts from industry which affect, or could appear to affect, the judgment of individual practicing physicians. In general, a professional society should make its own judgment about gifts from industry to the society itself.

- (d) When companies invite physicians to a dinner with a speaker, what are the relevant guidelines?

First, the dinner must be a modest meal. Second, the guideline does allow gifts that primarily benefit patients and that are not of substantial value. Accordingly, textbooks and other gifts that primarily benefit patient care, and that have a value to the physician in the general range of \$100 are permissible.

- (e) May physicians accept vouchers that reimburse them for uncompensated care they have provided?

No. Such a voucher would result directly in increased income for the physician.

- (f) May physicians accumulate "points" by attending several educational or promotional meetings and then choose a gift from a catalogue of education options?

This guideline permits gifts only if they are not of substantial value. If accumulation of points would result in physicians receiving a substantial gift by combining insubstantial gifts over a relatively short period of time, it would be inappropriate.

- (g) May physicians accept gift certificates for educational materials when attending promotional or educational events?

The Council views gift certificates as a grey area which is not per se prohibited by the guidelines. Medical text books are explicitly approved as gifts under the guidelines. A gift certificate for educational materials, i.e., for the selection by the physician from an exclusively medical text book catalogue, would not seem to be materially different. The issue is whether the gift certificate

gives the recipient such control as to make the certificate similar to cash. As with charitable donations, pre-selection by the sponsor removes any question. It is up to the individual physician to make the final judgment.

- (h) May physicians accept drug samples or other free pharmaceuticals for personal use or use by family members?

The Council's guidelines permit personal or family use of free pharmaceuticals (i) in emergencies and other cases where the immediate use of a drug is indicated; (ii) on a trial basis to assess tolerance; and, (iii) for the treatment of acute conditions requiring short courses of inexpensive therapy, as permitted by Opinion E-8.19: "Self-Treatment or Treatment of Immediate Family Members." It would not be acceptable for physicians to accept free pharmaceuticals for the long-term treatment of chronic conditions

- (i) May companies invite physicians to a dinner with a speaker and offer them a large number of gifts from which to choose one?

In general, the greater the freedom of choice given to the physician, the more the offer seems like cash. A large number of gifts presented to physicians who attend a dinner would therefore be inappropriate. There is no precise way of deciding an appropriate upper limit on the amount of choice that is acceptable. However, it is important that a specific limit be chosen to ensure clarity in the guidelines. A limit of eight has been chosen because it permits flexibility but prevents undue freedom of choice. Each of the choices must have a value to the physicians of no more than \$100.

Guideline 2:

Individual gifts of minimal value are permissible as long as the gifts are related to the physician's work (e.g., pens and notepads).

Guideline 3:

Subsidies to underwrite the costs of continuing medical education conferences or professional meetings can contribute to the improvement of patient care and therefore are permissible. Since the giving of a subsidy directly to a physician by a company's sales representative may create a relationship which could influence the use of the company's products, any subsidy should be accepted by the conference's sponsor who, in turn, can use the money to reduce the conference's registration fee. Payments to defray the costs of a conference should not be accepted directly from the company by the physicians attending the conference.

- (a) Are conference subsidies from the educational division of a company covered by the guidelines?

Yes. When the Council says “any subsidy,” it would not matter whether the subsidy comes from the sales division, the educational division, or some other section of the company.

- (b) May a company or its intermediary send physicians a check or voucher to offset the registration fee at a specific conference or a conference of the physician’s choice?

Physicians should not directly accept checks or certificates which would be used to offset registration fees. The gift of a reduced registration should be made across the board and through the accredited sponsor.

Guideline 4:

Subsidies from industry should not be accepted directly or indirectly to pay for the costs of travel, lodging or other personal expenses of physicians attending conferences or meetings, nor should subsidies be accepted to compensate for the physicians’ time. Subsidies for hospitality should not be accepted outside of modest meals or social events held as a part of a conference or meeting. It is appropriate for faculty at conferences or meetings to accept reasonable honoraria and to accept reimbursement for reasonable travel, lodging and meal expenses. It is also appropriate for consultants who provide genuine services to receive reasonable compensation and to accept reimbursement for reasonable travel, lodging and meal expenses. Token consulting or advisory arrangements cannot be used to justify compensating physicians for their time or their travel, lodging and other out-of-pocket expenses.

- (a) If a company invites physicians to visit its facilities for a tour or to become educated about one of its products, may the company pay travel expenses and honoraria?

This question has come up in the context of a rehabilitation facility that wants physicians to know of its existence so that they may refer their patients to the facility. It has also come up in the context of surgical device or equipment manufacturers who want physicians to become familiar with their products.

In general, travel expenses should not be reimbursed, nor should honoraria be paid for the visiting physician’s time since the presentations are analogous to a pharmaceutical company’s educational or promotional meetings. The Council recognizes that medical devices, equipment and other technologies may require, in some circumstances, special evaluation or training in

proper usage which can not practicably be provided except on site. Medical specialties are in a better position to advise physicians regarding the appropriateness of reimbursement with regard to these trips. In cases where the company insists on such visits as a means of protection from liability for improper usage, physicians and their specialties should make the judgment. In no case would honoraria be appropriate and any travel expenses should be only those strictly necessary.

- (b) If the company invites physicians to visit its facilities for review and comment on a product, to discuss their independent research projects or to explore the potential for collaborative research, may the company pay travel expenses and an honorarium?

If the physician is providing genuine services, reasonable compensation for time and travel expenses can be given. However, token advisory or consulting arrangements cannot be used to justify compensation.

- (c) May a company hold a sweepstakes for physicians in which five entrants receive a trip to the Virgin Islands or airfare to the medical meeting of their choice?

No. The use of a sweepstakes or raffle to deliver a gift does not affect the permissibility of the gift. Since the sweepstakes is not open to the public, the guidelines apply in full force.

- (d) If a company convenes a group of physicians to recruit clinical investigators or convenes a group of clinical investigators for a meeting to discuss their results, may the company pay for their travel expenses?

Expenses may be paid if the meetings serve a genuine research purpose. One guide to their propriety would be whether the NIH conducts similar meetings when it sponsors multi-center clinical trials. When travel subsidies are acceptable, the guidelines emphasize that they be used to pay only for “reasonable” expenses. The reasonableness of expenses would depend on a number of considerations. For example, meetings are likely to be problematic if overseas locations are used for exclusively domestic investigators. It would be inappropriate to pay for recreation or entertainment beyond the kind of modest hospitality described in this guideline.

- (e) How can a physician tell whether there is a “genuine research purpose?”

A number of factors can be considered. Signs that a genuine research purpose exists include the facts that there are; (1) a valid study protocol; (2)

recruitment of physicians with appropriate qualifications or expertise; and, (3) recruitment of an appropriate number of physicians in light of the number of study participants needed for statistical evaluation.

- (f) May a company compensate physicians for their time and travel expenses when they participate in focus groups?

Yes. As long as the focus groups serve a genuine and exclusive research purpose and are not used for promotional purposes, physicians may be compensated for time and travel expenses. The number of physicians used in a particular focus group or in multiple focus groups should be an appropriate size to accomplish the research purpose, but no larger.

- (g) Do the restrictions on travel lodging and meals apply to educational programs run by medical schools, professional societies or other accredited organizations which are funded by industry, or do they apply only to programs developed and run by industry?

The restrictions apply to all conferences or meetings which are funded by industry. The Council drew no distinction on the basis of the organizer of the conference or meeting. The Council felt that the gift of travel expenses is too substantial even when the conference is run by a non-industry sponsor. (Industry includes all "proprietary health-related entities that might create a conflict of interest" as recommended by the American Academy of Family Physicians.)

- (h) May company funds be used for travel expenses and honoraria for bona fide faculty at educational meetings?

This guideline draws a distinction between attendees and faculty. As was stated, "[i]t is appropriate for faculty at conferences or meetings to accept reasonable honoraria and to accept reimbursement for reasonable travel, lodging, and meal expenses."

Companies need to be mindful of the guidelines of the Accreditation Council on Continuing Medical Education. According to those guidelines, "[f]unds from a commercial source should be in the form of an educational grant made payable to the CME sponsor for the support of programming.

- (i) May travel expenses be reimbursed for physicians presenting a poster or a "free paper" at a scientific conference?

Reimbursement may be accepted only by a bona

fide faculty. The presentation of a poster or a free paper does not by itself qualify a person as a member of the conference faculty for purposes of these guidelines.

- (j) When a professional association schedules a long-range planning meeting, is it appropriate for industry to subsidize the travel expenses of the meeting participants?

The guidelines are designed to deal with gifts from industry, which affect, or could appear to affect, the judgment of individual practicing physicians. In general, a professional society should make its own judgment about gifts from industry to the society itself.

- (k) May continuing medical education conferences be held in the Bahamas, Europe or South America?

There are no restrictions on the location of conferences as long as the attendees are paying their own travel expenses.

- (l) May travel expenses be accepted by physicians who are being trained as speakers or faculty for educational conferences and meetings?

In general, no. If a physician is presenting as an independent expert at a CME event, both the training and its reimbursement raise questions about independence. In addition, the training is a gift because the physician's role is generally more analogous to that of an attendee than a participant. Speaker training sessions can be distinguished from meetings (See 4b) with leading researchers, sponsored by a company, designed primarily for an exchange of information about important developments or treatments, including the sponsor's own research, for which reimbursement for travel may be appropriate.

- (m) What kinds of social events during conferences and meetings may be subsidized by industry?

Social events should satisfy three criteria. First, the value of the event to the physician should be modest. Second, the event should facilitate discussion among attendees and/or discussion between attendees and faculty. Third, the educational part of the conference should account for a substantial majority of the total time accounted for by the educational activities and social events together. Events that would be viewed (as in the succeeding question) as lavish or expensive should be avoided. But modest social activities that are not elaborate or unusual are permissible, e.g., inexpensive boat rides, barbecues, entertainment that draws on the local performers. In general, any

such events which are a part of the conference program should be open to all registrants.

- (n) May a company rent an expensive entertainment complex for an evening during a medical conference and invite the physicians attending the conference?

No. The guidelines permit only modest hospitality.

- (o) If physicians attending a conference engage in interactive exchange, may their travel expenses be paid by industry?

No. Mere interactive exchange would not constitute genuine consulting services.

- (p) If a company schedules a conference and provides meals for the attendees that fall within the guidelines, may the company also pay for the costs of the meals for spouses?

If a meal falls within the guidelines, then the physician's spouse may be included.

- (q) May companies donate funds to sponsor a professional society's charity golf tournament?

Yes. But it is sensible if physicians who play in the tournament make some contribution themselves to the event.

- (r) If a company invites a group of consultants to a meeting and a consultant brings a spouse, may the company pay the costs of lodging or meals of the spouse? Does it matter if the meal is part of the program for the consultants?

Since the costs of having a spouse share a hotel room or join a modest meal are nominal, it is permissible for the company to subsidize those costs. However, if the total subsidies become substantial, then they become unacceptable.

Guideline 5:

Scholarships or other special funds to permit medical students, residents and fellows to attend carefully selected educational conferences maybe permissible as long as the selection of students, residents or fellows who will receive the funds is made by the academic or training institution.

- (a) When a company subsidizes the travel expenses of residents to an appropriately selected conference, may the residents receive the subsidy directly from the company?

Funds for scholarships or other special funds should be given to the academic departments or the accredited sponsor of the conference. The disbursement of funds can then be made by the departments or the conference sponsor.

- (b) What is meant by "carefully selected educational conferences?"

The intent of Guideline 5 is to ensure that financial

hardship does not prevent students, residents and fellows from attending major educational conferences. For example, we did not want to deny cardiology fellows the opportunity to attend the annual scientific meeting of the American College of Cardiology, or orthopedic surgery residents the opportunity to attend the annual scientific meeting of the American Academy of Orthopaedic Surgeons. However, it was not the intent of the guideline to permit reimbursement of travel expenses in other circumstances, such as when conferences or symposia are designed specifically for students, residents or fellows.

Accordingly, "carefully selected educational conferences" should be interpreted as follows: funds may be used for the reasonable travel and lodging expenses of students, residents and fellows to attend the major educational, scientific or policymaking meetings of national, regional or specialty medical associations. The Council recognizes that there may be some exceptional conferences for all physicians or even for just students, residents, or fellows that do not fall within this definition of carefully selected educational conferences but that meet the spirit of Guideline 5. Accordingly, the Council will considers proposals for travel and lodging subsidies for such conferences on a case-by-case basis and grant approval to those that meet the spirit of the guidelines.

Guideline 6:

No gifts should be accepted if there are strings attached. For example, physicians should not accept gifts if they are given in relation to the physician's prescribing practices. In addition, when companies underwrite medical conferences or lectures other than their own, responsibility for and control over the selection of content, faculty, educational methods, and materials should belong to the organizers of the conferences or lectures.

- (a) May companies send their top prescribers, purchasers, or referrers on cruises?

No. There can be no link between prescribing or referring patterns and gifts. In addition, travel expenses, including cruises, are not permissible.

- (b) May the funding company itself develop the complete educational program that is sponsored by an accredited continuing medical education sponsor?

No. The funding company may finance the development of the program through its grant to the sponsor, but the accredited sponsor must have responsibility and control over the content and

faculty of conferences, meetings, or lectures. Neither the funding company nor an independent consulting firm should develop the complete educational program for approval by the accredited sponsor.

- (c) How much input may a funding company have in the development of a conference, meeting, or lectures?

The guidelines of the Accreditation Council on Continuing Medical Education on commercial support of continuing medical education address this question.

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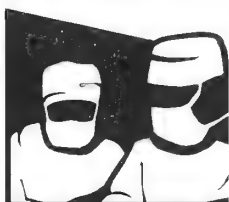
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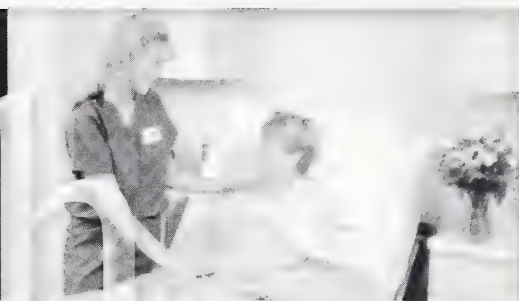
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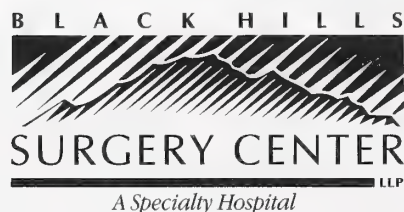
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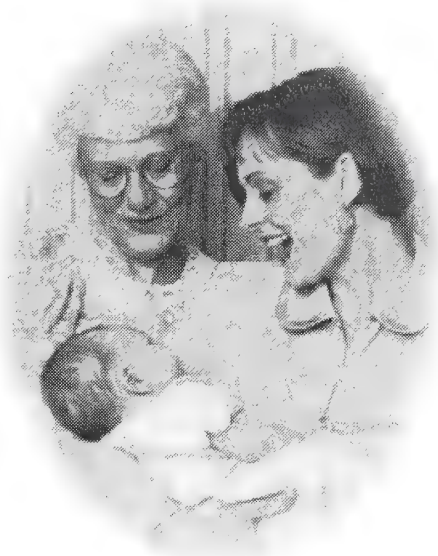
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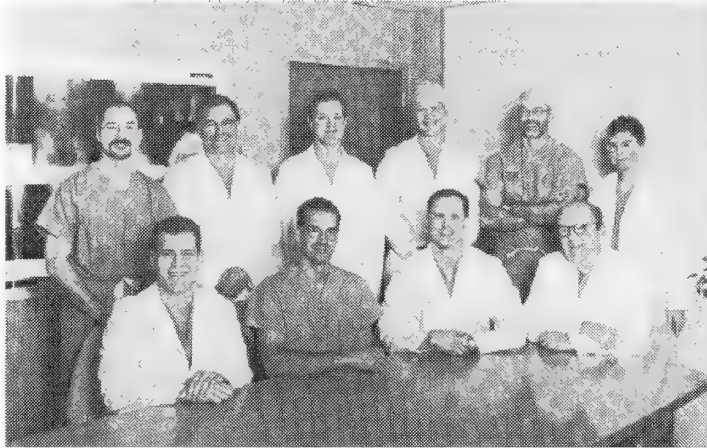
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INSTRUCTIONS FOR SUBMITTING MANUSCRIPTS

ORIGINAL MANUSCRIPTS: Material appearing in all publications of the *Journal of Medicine* should be typewritten, double-spaced and the original copy. An abstract of 100-200 words and a list of references should accompany each article. Footnotes should conform to the requirements for manuscripts, and each manuscript should include the name of the author(s), the location of the author(s) and title of the article. The pages should be numbered consecutively. Manuscripts which are published are not returned, but every effort will be made to return manuscripts not accepted or published by the *Journal*. Articles are accepted for publication on the condition they are contributed solely to this *Journal*.

REFERENCES: Should be listed in the order in which they appear in the article. They should be complete and accurate and include the author's name(s) and initials, title of article, abbreviated name of Journal, volume number, pages and year of publication. References to books should include authors, title, location and name of publisher, year of publication, edition and page numbers.

ILLUSTRATIONS: Satisfactory photographs or drawings should be supplied by the author. Each illustration, table, etc., should bear the author's name on the back. Photographs should be clear and distinct 5" x 7" glossy prints. Drawings should be made in black India ink on white paper. Used illustrations are returned after publication if requested.

The contact person at the *Journal* office is Kelli Achenbach, (605) 336-1965. Fax: (605) 336-0270. Email: kachenba@sdsma.org.

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CME Conferences

CME Conferences being held on a regular basis at various health care facilities throughout the state of South Dakota. (1 hour AMA Category credit available unless otherwise specified)

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced; Info: Sharon Sulzbach, 347-7145.

APRIL 2000

- Apr 15 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Apr 18 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Apr 18 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.
- Apr 18 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Apr 18 **USDSM Audio Conference** - - 2:30 PM; (CST)/1:30 PM (MST); Speaker: David Herman Ilson MD; Topic: Topoisomerase 1 Inhibition - Esophageal Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 18 **USDSM Audio Teleconference** - - 8:00 PM; (CST)/7:00 PM (MST); Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Apr 18 **USDSM Audio Conference** - - 2:00 PM; (CST)/1:00 PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Apr 19 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Apr 19 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Apr 19 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Apr 19 **USDSM Audio Conference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: James Brantley Thrasher MD, FACS; Topic: New Non-Steroidal Antiandrogen Dosing Regimen in the Treatment of Advanced Prostate Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Apr 20 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Apr 20 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Apr 20 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Apr 20 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Apr 21 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357 1585.
- Apr 22 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Apr 24 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Apr 25 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Apr 25 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Apr 25 **USDSM Audio Conference** - - 11:00 AM; (CST)/10:00 AM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Apr 26 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Apr 26 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Apr 26 **USDSM Audio Conference** - - 7:00 PM; (CST)/6:00 PM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Apr 27 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Speaker: Rosaleah Bernardo MD; Topic: Causes of Mortality in Children; Info: Dr. Larry Wellman - 333-7178.
- Apr 27 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Apr 27 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Apr 27 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.

- Apr 27 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Apr 28 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Apr 28 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Apr 29 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

MAY 2000

- May 2 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- May 2 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- May 2 **USDSM Audio Teleconference** - - 8:00 PM; (CST)/7:00 PM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 2 **USDSM Audio Conference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 2 **USDSM Audio Conference** - - 1:00 PM; (CST)/12:00 PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 3 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- May 3 **CPCWednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- May 3 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- May 3 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- May 3 **USDSM Audio Teleconference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 3 **USDSM Audio Teleconference** - - 7:00 PM; (CST)/6:00 PM (MST); Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 3 **USDSM Audio Conference** - - 2:00 PM; (CST)/1:00 PM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 3 **USDSM Audio Conference** - - 10:00 PM; (CST)/9:00 PM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 3 **USDSM Audio Conference** - - 8:00 PM; (CST)/7:00 PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 4 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- May 4 **Grand Rounds** - - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- May 4 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- May 4 **USDSM Audio Teleconference** - - 2:00 PM; (CST)/1:00 PM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 4 **USDSM Audio Teleconference** - - 9:00 PM; (CST)/8:00 PM (MST); Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 4 **USDSM Audio Teleconference** - - 1:00 PM; (CST)/12:00 PM (MST); Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 4 **USDSM Audio Conference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 4 **USDSM Audio Conference** - - 7:00 PM; (CST)/6:00 PM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 4 **USDSM Audio Conference** - - 11:00 AM; (CST)/10:00 AM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

May 5 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.

May 5 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

May 5 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.

May 6 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

May 8 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.

May 8 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.

May 9 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.

May 9 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

May 9 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

May 9 **Breast Cancer Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital BHI - 333-5244.

May 9 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

May 9 **USDSM Audio Teleconference** - - 8:00 PM; (CST)/6:00 PM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

May 9 **USDSM Audio Teleconference** - - 10:00 PM; (CST)/9:00 PM (MST); Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

May 9 **USDSM Audio Conference** - - 9:00 PM; (CST)/8:00 PM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

May 10 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

May 10 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.

May 10 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.

May 10 **Dermatopathology Conference** - 7:30 AM; SVH Pathology Conference Room 1513; Info: 333-1730.

May 10 **USDSM Audio Teleconference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

May 11 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Speaker: Jakica Tancabelic MD; Topic: to be announced; Info: Dr. Larry Wellman - 333-7178.

May 11 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

May 11 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

May 11 **USDSM Audio Teleconference** - - 11:00 AM; (CST)/10:00 AM (MST); Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

May 12 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.

May 12 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

May 13 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

May 16 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

May 16 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.

May 16 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

May 17 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

May 17 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.

May 17 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.

May 18 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

May 18 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.

May 18 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.

May 18 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

May 19 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

May 20 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

- May 22 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- May 23 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- May 23 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- May 23 **USDSM Audio Conference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 23 **USDSM Audio Conference** - - 11:00 AM; (CST)/10:00 AM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 23 **USDSM Audio Conference** - - 10:00 PM; (CST)/9:00 PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 24 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- May 24 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- May 24 **USDSM Audio Teleconference** - - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 24 **USDSM Audio Teleconference** - - 10:00 PM; (CST)/9:00 PM (MST); Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 24 **USDSM Audio Conference** - - 8:00 PM; (CST)/7:00 PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 25 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Speaker: Bruttadt Schmidt & Tracy Stephens; Topic: Early Indicators and Characteristics of Autism Spectrum Disorders; Info: Dr. Larry Wellman - 333-7178.
- May 25 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- May 25 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- May 25 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- May 25 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- May 25 **USDSM Audio Teleconference** - - 11:00 AM; (CST)/10:00 AM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 26 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- May 27 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- May 30 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- May 31 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- May 31 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.

MISCELLANEOUS

APRIL 2000

- Apr 16 **The 8th Annual Trauma Symposium**, Sioux Falls Convention Center, Sioux Falls, SD. 7 hrs Category 1 credit. Info: Kathy Miles, Avera McKennan, 800 E. 21st St, PO Box 5045, Sioux Falls, SD 57117-5045. Phone: 605-322-8950.
- Apr 27-28 **OB/GYN Update**, Doubletree Hotel Minneapolis, at the Mall, Bloomington, MN. Fee: \$285. 13 hrs AMA Category 1 credit. Contact: Registrar, Continuing Education, Regions Hospital, 640 Jackson St, St. Paul, MN 55101-2502. Phone: 651-221-3992. Fax: 651-292-4773.

MAY 2000

- May 9-10 **The New Practitioners Seminar**, Doubletree Lloyd Center Hotel, Portland, OR. 8 hrs AMA Category 1 credit. American Society of Bariatric Physicians, 5600 S. Quebec St., Ste 109A, Englewood, CO 80111. Phone: 303-770-2526 ext. 24. Fax: 303-779-4834.
- May 10-11 **The American Board of Bariatric Medicine Review Course**, Doubletree Lloyd Center Hotel, Portland, OR. 9.5 hrs AMA Category 1 credit. American Society of Bariatric Physicians, 5600 S. Quebec St., Ste 109A, Englewood, CO 80111. Phone: 303-770-2526 ext 24. Fax: 303-779-4834.
- May 11-13 **Western Regional Obesity Course**, Doubletree Lloyd Center Hotel, Portland, OR. 15 hrs AMA Category 1 credit. American Society of Bariatric Physicians, 5600 S. Quebec St, Ste 109A, Englewood, CO 80111. Phone: 303-770-2526 ext 24. Fax: 303-779-4834.

- May 12 **The 5th Annual Vascular Symposium**, Sioux Falls Convention Ctr, Sioux Falls, SD. 7 hrs AMA Category 1 credit. Info: Jane Hatch. Phone: 605-339-6776. Fax: 605-331-5314.
- May 12-19 **The 85th Annual American Occupational Health Conference "Foundations for the Future"**, Pennsylvania Convention Ctr, Philadelphia, PA. 49 hrs AMA Category 1 credit. American College of Occupational and Environmental Medicine, Ed Dept, 1114 N Arlington Heights Rd, Arlington Heights, IL 60004-4770. Phone: 847-818-1800 ext 371. Fax: 847-818-9286.
- May 16-17 **The 14th Annual South Dakota Rural Health Conference, "Technology, Traditions, Transition**, Ramkota Convention Ctr, Pierre, SD. AMA Category 1 credit avail. Contact: Lisa Kilawee, USD School of Med, Sec of Rural Health, Dept of Family Med, 1400 W 22nd St, Sioux Falls, SD 57105-1570. Phone: 605-357-1508. E-mail: lkilawee@usd.edu.
- May 18-20 **Interpretative Echocardiography: An Advanced Seminar in Interpretation of Two-Dimensional Doppler, Stress, and Transesophageal Echocardiography**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, Heart House Learning Ctr, 9111 Old Georgetown Rd, Bethesda, MD 20897-1407. Phone: 800-253-4636 ext 652. Fax: 301-897-9745.
- May 19 **New Treatment Options for Depression and Anxiety**, Radisson Encore Inn Hotel, Sioux Falls, SD. 6.5 hrs Category 1 credit avail. Info: Kate Naylor, USD School of Medicine, Dept of Psychiatry, 1400 W. 22nd St, Sioux Falls, SD 57105-1570. Phone: 605-357-1585.
- May 19-20 **Cognitive & Medical Treatment of Persons with Brain Injury: Tricks of the Trade**, Schroeder Auditorium, Sioux Valley Hospital. Fee: \$300. 11.5 hrs AMA Category 1 credit. Sioux Valley Hospital Physical Medicine & Rehab, 1100 S Euclid Ave, PO Box 5039, Sioux Falls, SD 57117-5039. Phone: 605/333-4569.

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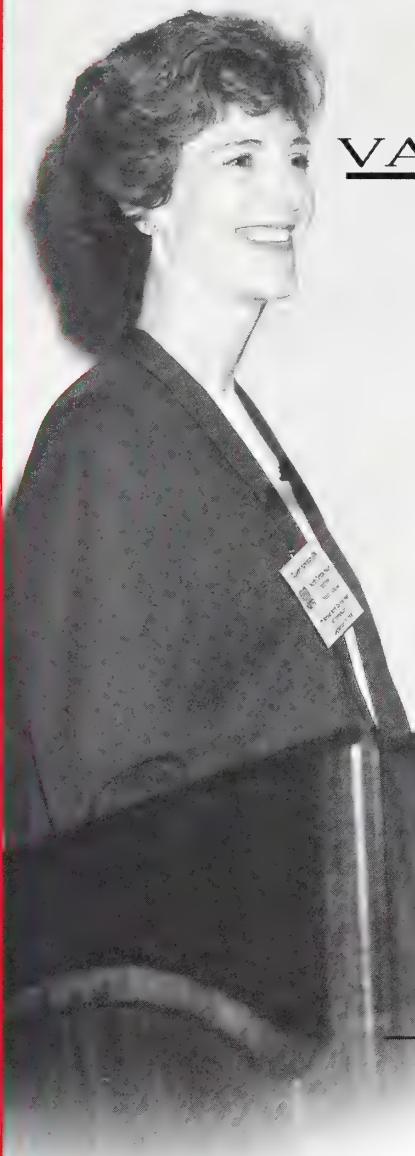
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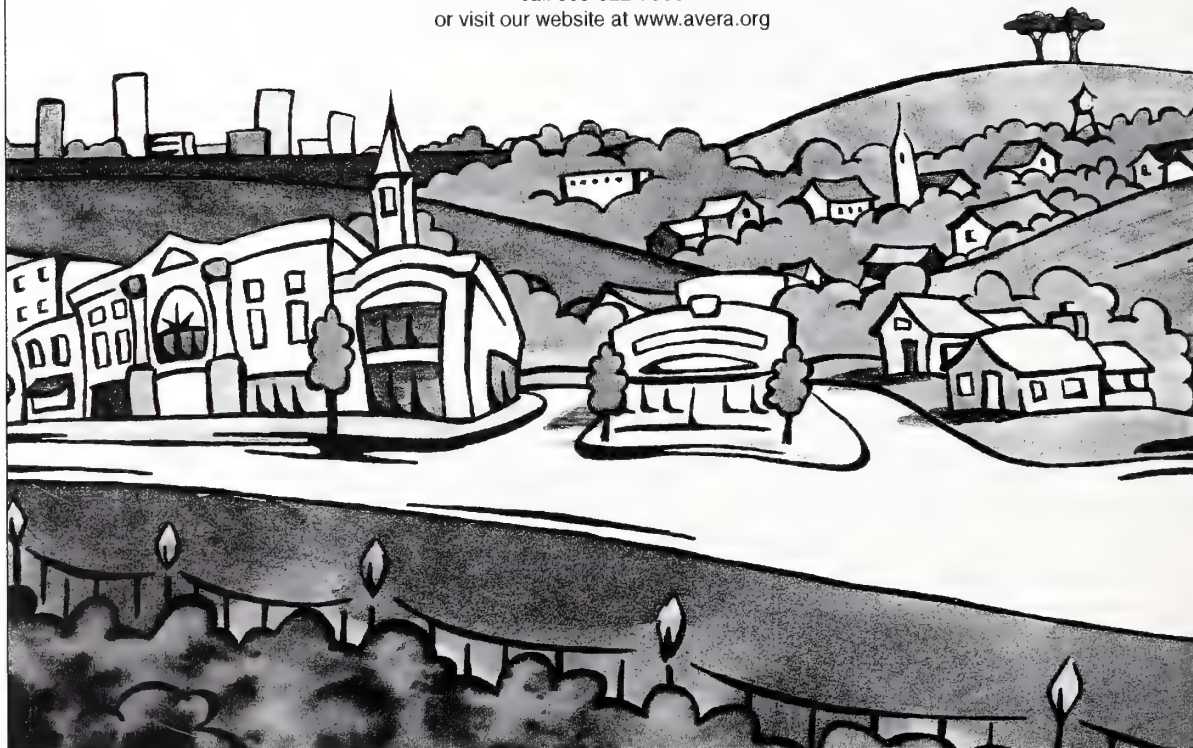
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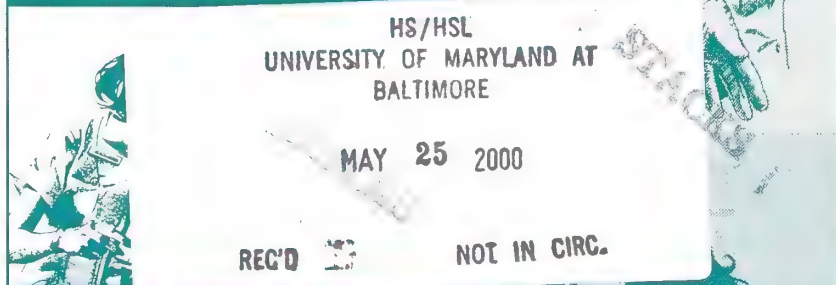
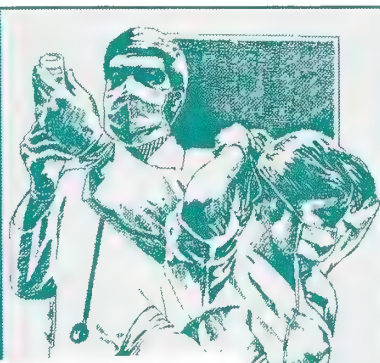


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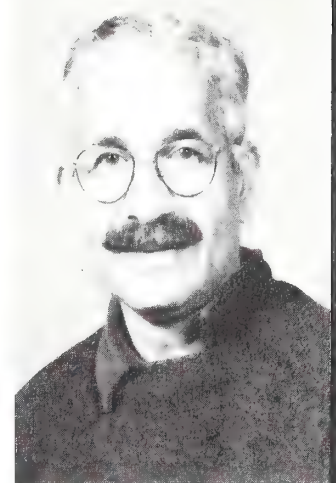
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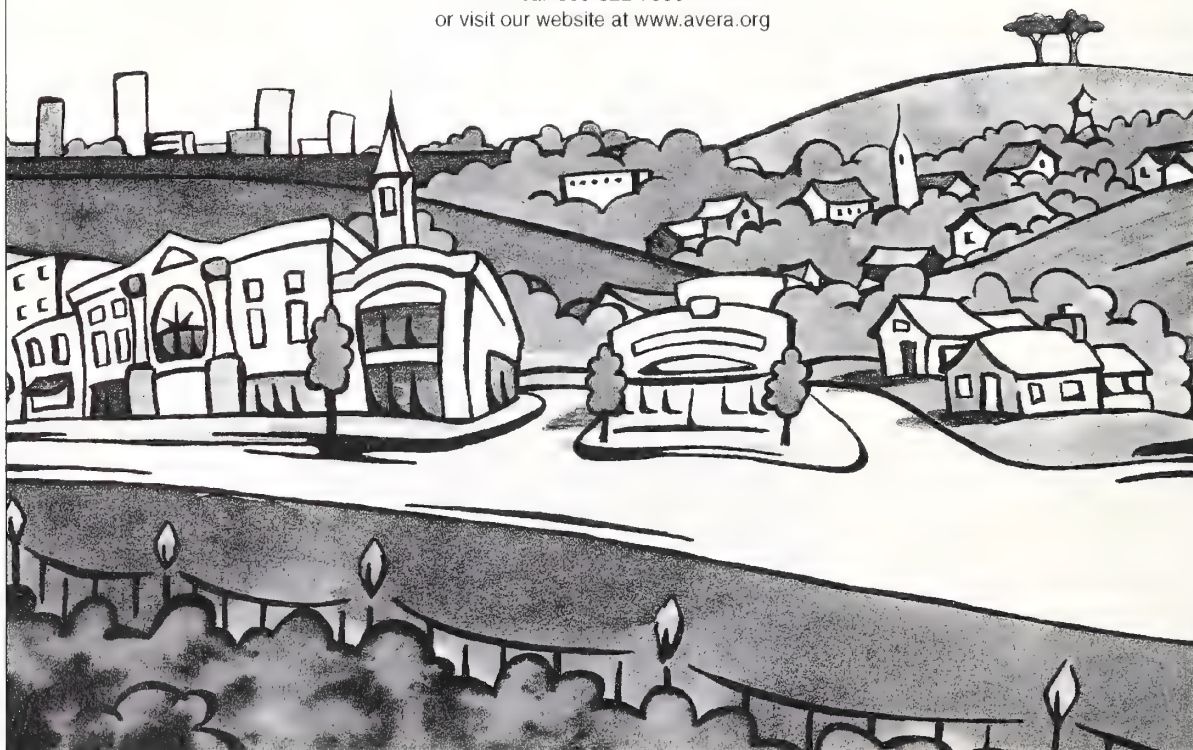
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The Annual Meeting of the South Dakota State Medical Association takes place June 8-10, Rapid City. Please make plans to attend.

President's Page



K. Gene Koob, MD, President
South Dakota State Medical Association

Thoughts After A Session Of Doctor's Lounge Gripping

HCFEA, HMO's, economic credentialing, scope of practice. Is that what's bugging you, Bucko? Did your income drop? Are the malpractice hyenas slobbering at you doorsteps? Are you worn out, tired and beaten to a frazzle? Is the fun gone? Is it a chore to head into the fray each day? If so I have wonderful news for you! You can beat them! You are the best and the brightest! Your skills are needed, valued and appreciated! You can keep the passion! There is a way to turn medicine back into the thrill it has been and always should be!

There is a tried and true way to do this. It does take some effort, but it works! Basically you have to find a new part of medicine to explore. How involved are you in the medical school? That is a great place to start. The students and residents will keep you on your toes and hopefully make you delve deeper into your own field of expertise. Several of your colleagues have found that writing is an excellent way to rekindle your fires. Teaching is great, and it doesn't have to be strictly in medicine. My esteemed partner, Jerry Freeman, spends a significant amount of time with college students in his course on ethics. I've enjoyed being part of a coast guard auxiliary course on boating skills (my section involves hypothermia, near drowning and the effects of alcohol, sun and noise on boaters).

My personal source of fuel was the South Dakota State Medical Association. My level of involvement obviously became quite high a few years ago. It was at that time that I was experiencing my own form of burn out. I found that the involvement with the SDSMA brought me into closer contact with colleagues throughout the state. To me it was like a breath of fresh air. Listening to Mary Carpenter, Jim Englebrecht, Jim Hovland, Ben Henderson, Steve Schroeder, Tom Herman, Mike Elston, my dear friends Howard Saylor and Jim Larson, and countless others opened new vistas into the realm of medicine. New thoughts and ideas abound out there. Enter in, join, be a part of this large group. It can only enrich your mind and your soul.

Finally don't forget who you are and what you have done to reach the goals that you have achieved. It wasn't easy getting into medical school, surviving gross anatomy and your first view of the inside of a living human in the operating theatre. You soon found out those were only the preliminaries to the intense learning and work that residencies entailed. Then you entered into your practice. What a feeling! Hopefully, part of that can stay with you. One of the ways to do this is to hone your skills. Meetings, lectures and exploring the world of practice parameters can all help. Its amazing how much better you can feel about yourself and your work when your skill level rises. Don't forget that you belong to one of the few professions that can be there to save a life, see a newborn baby, or to help lift the burden from the shoulders of your fellow human beings.

Our colleagues in South Dakota have shown us the way. Their skills, compassion and dedication to medicine are all reasons that I consider them my heroes. Walk with them, talk with them, and observe them at work. Their performances can help keep our fires and passions strong. I have truly walked with my heroes. Look about you and that joy can also be yours.

Finally I want to thank all of you who have been of great assistance to me this year. The staffs of the medical association and my office kept me afloat and almost on schedule. Jan Anderson, Paul Jensen, and Kelli Achenbach were always there when I needed them. My partners had to shoulder an extra load and did so with grace and a little sympathy. Finally, Karen was my sounding board, my shoulder to cry on and a great supporter. It's been a great year! See you all in Rapid City!

A handwritten signature in dark ink, appearing to read 'K. G. Koob'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Alliance News



Ronda Stensland, President
South Dakota State Medical Association Alliance

*SDSMA Alliance - the oldest continuous
Medical Alliance in the United States.*

Congratulations to the members of the SDSMA Alliance for another successful year. This organization has not only survived for ninety years, but has thrived. Thrived because of the 500+ dues paying members who believe in who we are and what we do. *Physicians' spouses dedicated to the health of America.*

I hope you are making plans to attend the 90th Annual Meeting of the SDSMA Alliance to be held in Rapid City June 8-10, 2000, as we celebrate the past year's achievements and formulate our goals as we enter into the 21st century.

Colleen Adams, Immediate Past-President, AMAA, will be our national guest. Though she is officially listed as a guest, she has been a friend to our state alliance for several years. It is with great pleasure that I welcome Colleen back to South Dakota.

Gold Rush for AMA Foundation fundraising event on Thursday evening will be a highlight of the convention. Many thanks to Tom and Mollie O. Krafka for the numerous hours spent coordinating the "mining experience." Two raffle drawings will be held during the event: A 2000 Gold Suburban valued at \$40,000,

and two round trip airline tickets anywhere in the continental U.S., both of which were donated. The dessert and wine reception is sponsored by **The First National Bank in Sioux Falls**, so all proceeds from the event and raffle ticket sales will benefit the USD School of Medicine.*

Meetings, reports, discussions, luncheons, dinners, fundraising, and celebrating **us**, will be on the agenda for the 90th annual meeting of the SDSMA Alliance. I look forward to seeing all of you in the beautiful Black Hills!

This is my final opportunity to speak to you through this forum. Last year at this time I was excitedly beginning my entrance as your president, I am now reflective and a bit wistful as I prepare for my exit. Before I journey into my next role, immediate past president, I want to express my gratitude to the members of the Board for their enthusiasm, support, ideas, and hard work. It was a pleasure working with all of you. Thank you.

District visits were something that I eagerly anticipated. Not only was it an opportunity to meet Alliance members throughout the state, but a chance to hear first hand about all of the wonderful things each of you do to help make your community a healthier and safer place to live. Thank you.

I will miss working with the staff at the SDSMA office. Your helpfulness and kindness was appreciated. Thank you.

I am grateful to the South Dakota State Medical Association for embracing and supporting our projects and causes this past year. Thank you.

Words cannot express what I feel in my heart for all of you and this organization. It has been an honor and a privilege to serve as the 90th President of the SDSMA Alliance. It has been one of the best experiences of my life. Thank you.

Now as I sign my name to my last Alliance News article, I would like to say "welcome" to the 91st President of the South Dakota State Medical Association Alliance, **Karen Waltman**.

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Editorial

We Had Better Get Moving! Join South Dakota Med PAC!



Health care is a political and public issue, and the public and its representative legislative bodies will determine how we practice medicine. The keen interest of the public in health can be easily seen in the news programs on television, which frequently dedicate whole segments to health care ranging from adverse outcomes to significant new therapies and technical advances. I cannot even finish reading recent issues of the most commonly read medical journals before I have heard a news commentator describe the results of articles. Due to their brevity, the conclusions drawn from the these articles can be misleading, even when quoted quite accurately, due to the inability to relate the findings to a larger picture. Actually, we should be glad for the public interest; but, as physicians, we then have a large responsibility for sharing in the shaping of public opinion.

The recent legislative history in South Dakota is alarming. When I first came to this state over 30 years ago, the chiropractors were trying to pass legislation to enable them to perform school athletic physical examinations. This had always been defeated previously. This year the chiropractors got their bill passed with an organized campaign in which they demonstrated to the legislators' satisfaction that they have enough extensive and adequate training compared to physicians; and, certainly, physician assistants, whom they claim perform many of the examinations. I contacted several legislators about this and was surprised to find how they had made up their minds in spite of my opposition. I had established a reasonably good relationship with these legislators and found them much more receptive on other issues in the past. A lot can be accomplished with a little organized campaigning.

In the last several years the South Dakota legislature has passed, but the governor has vetoed, major bills dealing with independent practice for certified nurse anesthetists and broad drug prescription authority for optometrists. I pick these two because I believe that one of the greatest dangers medical doctors in South Dakota face is the desire of a variety of health professionals for independent and unsupervised practice. Certainly, this is partly an economic issue, but it is a much larger quality of care issue which must be emphasized to our legislators on every possible occasion.

The question then, is what can we do about it? We are not all going to devote the tremendous time and effort that many of the presidents and staff of the SDSMA have, but we can become involved in local political races, and we can contribute to, and join, the SDMedPAC.

Striking up conversations with present and potential legislators on office visits or social occasions is relatively easy in our sparsely populated state. Certainly, we can discuss the major issues of supervision and independent practice of the health care professionals mentioned earlier. This will often mean being informed about unfamiliar areas of medicine. I believe you must do this even if you feel the particular issue might not affect your practice.

Another guideline for aid in discussion may be the six questions suggested by the AMA. The questions are:

1. Does my candidate support a meaningful patient's bill of rights?
2. Does my candidate believe physicians, not insurance plans, should determine what care is medically necessary for my family and me?
3. Does my candidate believe that HMOs should be held accountable for treatment decisions that harm patients?
4. Does my candidate support health coverage for all Americans?
5. Does my candidate support tax based incentives to make it easier for American families to afford health insurance?
6. Does my candidate have a plan to reform Medicare (or Medicaid)?

I realize these are national issues, but the implications spill over into local arenas as well, and every physician should have a rational and informed opinion on these issues.

You are probably getting tired of these somewhat repetitive editorials on the subject of political involvement. For this physician it is near the end of his career and his day. And younger physicians must realize the political day is growing late, even for you. In fact, it is getting dark.

J.F. Barlow, MD
Editor

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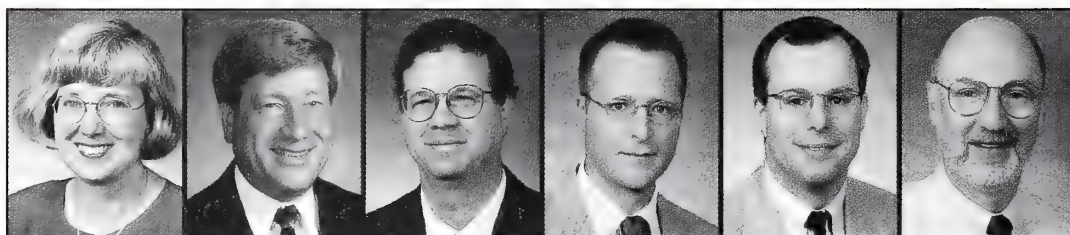
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Davison County I-3 Pilot Project For Childhood Immunizations In Children Under Two Years Of Age

Martin J. Christensen, MD

ABSTRACT

In 1995, a Davison County Immunization Subcommittee was organized to implement the Infant Immunization Initiative (I-3). The goal of the subcommittee was to improve the immunization rate in the county. Prior to the study, the immunization rate for Davison County was at 40% for children under the two years of age. Davison County had the lowest immunization rate in the state of South Dakota. At the conclusion of the study, 96% of children in Davison County were immunized by their second birthday according to recommendations of the Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP). Davison County surpassed President Clinton's goal of 90% immunization rate for children under two years of age.

BACKGROUND/INTRODUCTION

Infant immunization rates in the United States are the third lowest in the Western Hemisphere. All 50 states require immunizations prior to attending school or Head Start programs. Despite this requirement, 50% of American children under the age of two are inadequately immunized. This is the age children are most susceptible to disease. President Clinton established the childhood immunization initiative to build a vaccination delivery system.¹ In response, South Dakota established the Infant Immunization Initiative (I-3), combining educational efforts, community organizations, and increased access to opportunities for immunization as an effort to improve infant immunization. In Davison County, South Dakota, 40% of children were not immunized by the age of two in 1995. The I-3 program accepted and promoted President Clinton's goal to achieve a 90% immunization rate for the state of South Dakota for children under two years of age by the year 2000.

Davison County ranked 66th out of 66 counties in South Dakota in 1995 with an immunization rate of 40% for children two years of age.² In 1995, a meeting of the Community Health and Safety Planning group identified the childhood immunization rate as one of 24 problems facing the community. A Davison County

immunization subcommittee was organized to implement I-3 into the community in an effort to improve the immunization rate in the county. The subcommittee consisted of a family physician, the state epidemiologist (a consultant), a Davison County Health Nurse, the WIC regional nutritionist, the I-3 nurse, the Mitchell Public Schools nurse, the director of the Maternal Care Center at Avera Queen of Peace Hospital, a community health department nurse, one faculty member from the South Dakota State University College of Pharmacy (a consultant), representatives from the Children's Clinic in Mitchell, the Department of Social Services, and from local community service groups (i.e. Kiwanis, Extension Club).

METHODS

The Davison County Immunization Subcommittee met on a regular basis to discuss ways to improve the immunization compliance rate for Davison County. This included development of a pilot tracking system for the State Health Department to monitor immunization compliance, identify reasons for lack of untimely compliance, and how best to intervene. One function of the I-3 committee was to confirm or refute statistics previously compiled by the State Health Department. A non-randomized, non-controlled, non-blinded prospective study of newborns and their rate of

immunization compliance from the time of birth until they achieved the age of two years old was conducted. All babies born at Avera Queen of Peace Hospital in Mitchell, South Dakota, during a nine-month period were enrolled in the study. The newborns social security numbers were used for tracking immunization compliance. An appointee from the pharmacy department at Avera Queen of Peace Hospital in Mitchell generated a list from the Meditech computer system of all the patients to whom hepatitis B vaccine was administered and their primary care physician. The first dose in the hepatitis B series was administered to the newborn prior to discharge from the hospital. This list was sent to the hospital contact person, who coordinated monthly distribution of the list to the individual physician clinic's contact person. The clinic contact person ensured that the initial hepatitis B immunization record was logged into the computer system of tracking immunization compliance following reception of the hepatitis B immunization record from the hospital. The CASA (Clinical Assessment and Statistical Analysis) computer program was used as the tracking device and database. Data was collected on each child until they reached the age of two, or until their immunizations were complete (whichever occurred first). Children who moved into Davison County were not included in the study. Newborns from Avera Queen of Peace Hospital who left their primary care provider anytime during the two-year review period were excluded from the study, as were two newborns that succumbed to Sudden Infant Death Syndrome (SIDS).

The list of newborns, their primary care physician, and the first dose in the hepatitis series was also sent to the state and community health departments. The rationale for sending this list to both the newborn's primary care physician and the State Health Department was twofold. The State Health Department served as the home databank for all children born in the county, and tracked trends of immunization non-compliance as well as submitted this information back to the childhood immunization committee for review, intervention, and follow-up. The community health department compiled data for the immunizations they

administered (via the CASA system) to include those children who had not received their immunizations from their primary care physician.

The State Health Department, under the direction of the state epidemiologist, contacted the childhood immunization committee monthly with a list of children who had not received their immunizations at the recommended times, as established by the Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP). The committee met on a monthly basis to review the findings. After review of the "fall outs" from the desired immunization schedule, efforts to encourage and obtain immunizations for these children proceeded. Steps taken included notification to the community health department and the primary care physician clinic with the name of the patient and the missed immunization.

A flow diagram represents the process of tracking immunization compliance for Davison County. (Figure 1)

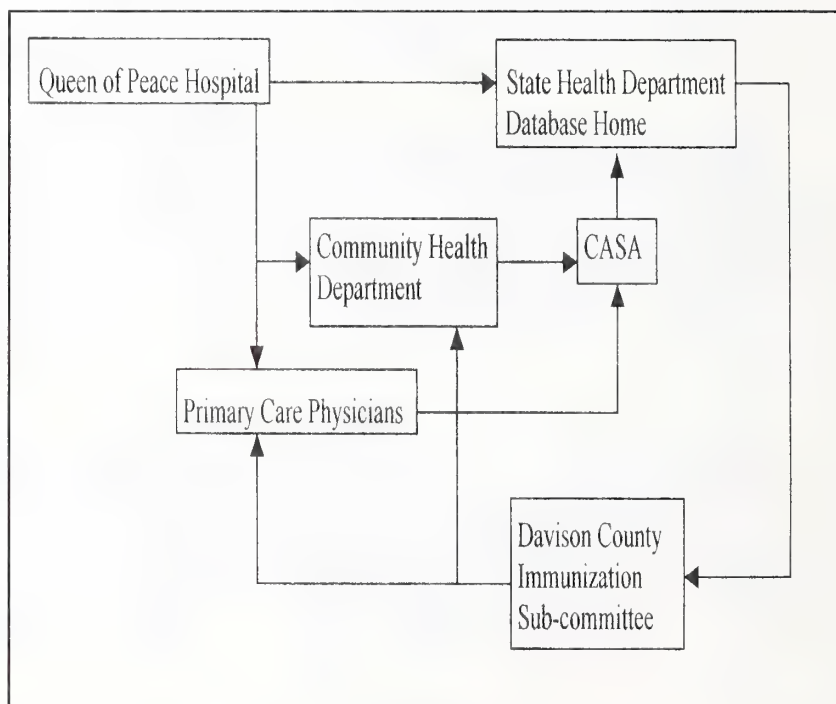


FIGURE 1
Process of tracking immunization compliance.

Over a three-year period results of completed immunizations were obtained from the South Dakota Immunization tracking records. The results were reviewed monthly for the first 18 months, and then every three months for the remaining 18 months of the study. The incomplete records were reviewed with each clinic

to find out the cause of delayed immunizations and updated at the next three-month visit. Periodic updates of progress of the study were provided to the Davison County I-3 Committee, Avera Queen of Peace Hospital and committees, all participating clinics, Davison County Community Health Nurses and South Dakota State Immunization Committee.

RESULTS

There were 411 children included in this study. Of those, 142 children moved from Mitchell and two infants died of SIDS. Therefore, 267 children form the cohort for the study. Of the 267 children, 256 completed their immunizations while under the age of two (96%).

From the 11 children not completing immunizations by the time they reached two years of age, the majority of delays (9 children) were related to infections, including otitis media, bronchitis and pneumonia. Rarely were financial abilities (1 child), access to care, or other reasons (1 child) cited by parents.

Even though 96% of the children were immunized in Davison County by the age of two, the immunizations were not always given according to the schedule recommended by the Centers for Disease Control and Prevention (CDC), the AAP, and the AAFP. In 1994, the CDC noted that immunizations given at "longer-than-recommended intervals between doses do not reduce final antibody concentrations. However, administering doses of a vaccine or toxoid at less than the recommended minimum intervals may decrease the antibody response and therefore should be avoided. Doses administered at less than the recommended minimum intervals should not be considered part of a primary series."³ The most common cause of postponing immunizations identified was that children were ill at the time the immunization should have been administered. The two illnesses most frequently identified were upper respiratory infections (URI) and otitis media. Santoli et al (1999) advise that these illnesses should not, in themselves, preclude children from receiving timely immunizations, but rather, the provider should take advantage of opportunities while the children are in their offices.

Physicians need to be aware of absolute contraindications versus relative contraindications in making a clinical judgment of whether or not to immunize.⁴ According to CDC, absolute contraindications to immunizations include any "condition in a recipient which is likely to result in a life-threatening problem if vaccine is administered." The CDC alleges there are only two permanent contraindications to administration of vaccines and they include a severe allergy to a component or following a

prior dose and encephalopathy without a known cause occurring within 7 days of a dose of pertussis vaccine. Contraindications are further defined according to temporary contraindications and include pregnancy, immunosuppression, severe illness and recent receipt of blood products.⁵ The CDC and the AAP both recommend that children with minor illnesses be vaccinated regardless of the degree of fever.⁶ Despite the time delays in immunizing children in Davison County, physicians were able to complete all recommended immunizations in 96% of the children by the second birthday.

Approximately one-third of the children born in our target population moved away from our clinical practices. This study showed 144 of the 411 children (33%) in our target population moved away. Our society is a mobile one. This would support the need for a South Dakota statewide or national tracking system to assure the continuity of care by the receiving providers nationwide.

It was documented that in 1994, approximately 25% of children under two were vaccinated by more than one provider.⁷ This data certainly supports at least a statewide database and preferably a national database containing this information on individual immunizations.

Development of a statewide database in South Dakota containing immunization information and notification to the children's providers to inform him/her of missed immunizations was extremely efficacious in ensuring children received all recommended immunizations by the age of two.

Collaborative community efforts by the subcommittee, and development of a tracking system have positively impacted the immunization rate. Davison County, South Dakota, started with a 40% immunization completion rate of children properly immunized by the age of two in 1994. At the end of this study, including the development of an immunization tracking system, the immunization rate of complete immunizations in children under two years of age improved to 96%, surpassing the president's goal of 90% by the year 2000.

ACKNOWLEDGEMENTS

I would like to acknowledge the efforts of all those involved in this pilot project to meet the challenge of President Clinton's goal to achieve a 90% immunization rate for children under two years of age.

AUTHOR

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SUBCOMMITTEE MEMBERS

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TNK-tPA: A New Thrombolytic For Treatment Of Acute Myocardial Infarction

Thomas J. Johnson, PharmD, BCPS; Sioux Falls, SD

Ever since the GUSTO trial¹, recombinant tissue plasminogen activator (rt-PA) given as an accelerated 90-minute infusion has been an excellent choice for treatment of acute MI. The recently approved product TNK-tPA (tenecteplase) is a genetically altered form of rt-PA in which small changes in certain regions of the molecule have altered the properties of the thrombolytic molecule. These changes resulted in a product that is more fibrin (clot) specific, has a longer plasma half-life and is more resistant to plasminogen activator inhibitor (PAI-1). Therefore, this product has the potential to have fewer side effects, to be given as a bolus injection, and to be a more potent molecule.^{2,3}

The efficacy and potential advantages of TNK-tPA have been tested in several clinical trials.³⁻⁶ The TIMI 10A investigators set out to find a safe dosing range and prove that the drug could be given as a single bolus. Their results indicated that a dosing range between 30 and 50mg given as a single IV bolus over 5-10 seconds provided adequate coronary perfusion and acceptable safety results. These investigators also found that TNK-tPA had less effect on plasma fibrinogen and plasminogen as compared to rt-PA. These decreased effects on plasma clotting proteins have the theoretical advantage of decreasing systemic side effects, but this effect has yet to be proven clinically.³ The ASSENT-1 trial was designed to determine the safety of different doses of TNK-tPA. Three different doses were given during the trial and all three doses were found to be safe with an overall intracranial hemorrhage rate of <1%.⁴

TIMI 10B was designed to look at doses of 30mg vs. 50mg of TNK-tPA compared with accelerated rt-PA. The 50mg dose was reduced to 40mg during the trial because of concern of bleeding risk in-patients in the higher dosing arm. When the dose was evaluated based on patient weight in this trial, it became clear that tenecteplase should be dosed per patient weight and not a standard dose for all patients. TIMI 10B also compared coronary reperfusion rates in each group and found nearly identical 90 minute TIMI grade 3 flow rates in the 40mg TNK-tPA and rt-PA groups. Safety

data was similar in all groups with adverse events (characterized as bleeding) decreased after heparin dosing was changed.⁵

The ASSENT-2 trial was a large, worldwide trial to assess equivalence of TNK-tPA bolus thrombolytic and accelerated rt-PA, with a primary endpoint of all-cause mortality at 30 days. Using data from earlier trials, ASSENT-2 utilized a weight-based approach to dosing tenecteplase. Patients were dosed with 30 to 50mg of tenecteplase depending on their weight. Results of the trial showed equivalence in thirty-day mortality between accelerated rt-PA and TNK-tPA. Sub-group analysis showed no difference between rt-PA and TNK-tPA in specific groups except in the group treated 4 hours or greater after onset of chest pain in which TNK-tPA was more effective. The authors of the trial attributed this difference to the higher fibrin specificity of TNK-tPA, which would make it more effective dissolving established clots. Adverse effects were classified mainly as cerebral or non-cerebral bleeds. No difference in cerebral bleeds was seen between the two drugs, although non-cerebral bleeding events occurred statistically less often in the TNK-tPA group.⁶

To summarize, TNK-tPA (tenecteplase) is a fibrin specific, thrombolytic agent that is equivalent to accelerated rt-PA infusion in both efficacy and safety, yet can be given in a convenient single bolus IV injection. Further research may identify specific patients that will benefit from the drug's decreased effects on plasma plasminogen, fibrinogen and other plasma proteins, but for now, it can be considered an equivalent product to rt-PA. The advantages of the product appear to be substantial. We now have a product that can be given in a rapid IV bolus form, which has the potential to accelerate administration of a thrombolytic agent to patients even before they reach the hospital. At the very least tenecteplase will ensure appropriate delivery of the product without the mess of changing infusion rates (as with rt-PA), or remembering to give a second bolus (as with rPA). Tenecteplase (TNKase[®] Genentech, Inc.) is due to be available in late April to June of 2000.

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Dr. M. Stuart Grove, 92, died at Sioux Valley Hospital on March 11, 2000. Dr. Grove was born September 4, 1907, in Dell Rapids, SD, where he grew up on a farm and the seed of becoming a physician was first planted. Dr. Grove often accompanied his father, Dr. Martin Melvin Grove, on house calls and learned much about surgery from his father. Dr. Grove completed medical school at the U of Minnesota and served his surgical residency at Ancker Hospital in St. Paul. He also served as assistant superintendent and resident at the hospital. He married Marion Burnett in Fargo, ND, in 1935, and established his Sioux Falls practice in 1942. He is survived by his wife, three daughters, seven grandchildren and one great-grandchild.

* * * * *

Dr. Verlynn Volin, a longtime South Dakota obstetrician, died at Avera Prince of Peace Retirement Center March 8, 2000. Born and raised in Lennox, SD, Dr. Volin acquired a lifelong love of medicine from his physician father. He passed on that love through teaching as a clinical associate professor in family medicine at USD School of Medicine. Dr. Volin was on staff at both Sioux Valley Hospital and Avera McKennan Hospital, serving two terms as chief of staff with McKennan Hospital. He was also a charter member and diplomate of the American Academy of Family Practice.

After graduating from SDSU, Dr. Volin attended Northwestern University and USD School of Medicine, before receiving his medical degree from the University of Vermont in 1943. Following an internship and residency in Detroit, he served with the US Army in World War II as a psychiatric physician. In 1945, Dr. Volin married Suzanne Cronin in Windsor, Ontario, Canada. In 1988 he was named South Dakota's Family Doctor of the Year by the SD Academy of Family Physicians.

Dr. Volin is survived by his wife, five daughters, three sons, and 23 grandchildren.

* * * * *

General Practice physician, **Dr. Rafael C. Carrera**, has joined the Day County Medical Center. Dr. Carrera was born in El Salvador and received his education at the National University of Mexico. He took his postgraduate residency training in Saskatchewan, St. Louis, Ottawa, and New Orleans. He and his wife, Joanne, have three grown children.

Dr. Werner Klar, 77, died at Rapid City Regional Hospital, February 25, 2000.

The former Sioux Falls and Flandreau physician was born March 1, 1922, in Berlin, Germany. He received his medical degree from the University of Prague. Shortly afterward, he moved to Winnipeg, Canada, where he married his wife, Mary, on July 29, 1953.

Dr. Klar and his wife relocated to Sioux Falls in 1954 and he interned at Sioux Valley Hospital. He practiced medicine at Flandreau and Geddes before moving to Sturgis in 1979. He practiced at Fort Meade until his retirement in 1990.

* * * * *

Sioux Falls native, **Dr. Thomas J. Billion, Jr.**, died March 10, 2000, at the Avera Prince of Peace Retirement Center.

Dr. Billion received his undergraduate degree from Creighton University in 1934, went to USD School of Medicine for two years and then went back to Creighton and received his medical degree in 1938. In December, 1940, Dr. Billion joined the Navy and attended flight surgeon's school. He continued in the Navy as a flight surgeon until the end of World War II.

After marrying Eleanor Mitchell in 1944, and completing his medical residency in Detroit, Michigan, Dr. Billion returned to his hometown and began practicing medicine with his father. His Sioux Falls practice continued until his retirement in 1981. Survivors include his wife, three sons, two daughters, and seven grandchildren.

* * * * *

University Physicians welcomes **Dr. Mark C. Campbell** to its Rapid City clinic. Dr. Campbell received his medical degree from Chicago Medical School, and completed an internal medicine residency at Lutheran General Hospital, an affiliate of the University of Chicago. Dr. Campbell will specialize in the diagnosis and treatment of diabetes and thyroid disease. He has also been named an assistant professor in the Department of Internal Medicine at the USD School of Medicine.

Two Yankton Medical Clinic physicians have reached Dilomate status in their respective specialties.

The American Board of Pediatrics has certified **Dawn M. Larson, MD**, as a Diplomate of that Board. Dr. Larson passed the Board's certification exam, a test of the physician's abilities in pediatrics.

Dr. John Sternquist, a general surgeon with Yankton Medical Clinic, has been named Diplomate by the American Board of Surgery. Dr. Sternquist also passed a recertification exam. American Board of Surgery Diplomates must continue to demonstrate their competence in the specialty by taking recertification exams every ten years.

* * * * *

Two South Dakota physicians were recently certified as Diplomates of the American Board of Family Practice (ABFP).

Dr. Nancy Babbitt and **Dr. Mary Beecher** have earned Diplomate status by passing the ABFP's certification examination, an intensive written test of a physician's knowledge in pediatrics, internal medicine, surgery, obstetrics, gynecology, psychiatry, prevention, and other aspects of family practice.

Dr. Babbitt practices at Belle Fourche and Spearfish Family Medical Centers, while Dr. Beecher is practicing at the Madison Community Medical Center.

* * * * *

Dr. Pierre Kamguia has joined the Yorkshire Eye Clinic in the practice of comprehensive ophthalmology. A native of Cameroon, Dr. Kamguia earned his medical degree from the University of Yaoundè in that country. He also holds a Master of Science in bostatistics

epidemiology and public health from Tulane University. Dr. Kamguia, his wife Becky and their three sons recently moved to Brookings from Rhode Island.

* * * * *

The **South Dakota State Medical Association** has received the approval of the Committee for Review and Recognition (CRR) as an accreditor of intrastate providers of Continuing Medical Education (CME). The Committee met March 4, 2000, to consider the SDSMA application. The approval was reached following the CRR's consideration of the data contained in an SDSMA written submission of information, a site visit by a team of the Association's peers, and a thorough review by the CRR.

* * * * *

Madison area physician, **Dr. Richard Sample**, recently became re-certified as a Diplomate of the American Board of Family Practice (ABFP). Family physicians earn diplomate status by passing the ABFP's certification exam, an intensive written test of a physician's written knowledge in pediatrics, internal medicine, surgery, obstetrics, gynecology, psychiatry, prevention, and other aspects of family practice.

* * * * *

Dr. Tatiana Sergeev recently became board certified in pediatrics. A native of Russia, Dr. Sergeev practiced pediatric medicine several years before moving to the United States in 1993. Dr. Sergeev completed her American Pediatrics Residency training program at the Marshall University School of Medicine in Huntington Beach, West Virginia. She is currently practicing at the Brookings Medical Clinic in Brookings.



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Dr. Brent James is currently the Vice President for Medical Research and Executive Director of the Institute for Health Care Delivery, Intermountain Health Care. Widely recognized for its work in clinical quality improvement, IHC is an integrated system of 23 hospitals, more than 60 clinics, a 400+ member physician group. It is an HMO/PPO insurance plan responsible for more than 800,000 covered lives. Dr. James serves on the Institute of Medicine's National Roundtable on Healthcare Quality, as well as on the boards of several other not-for-profit health care institutions. He is committed to focusing on measuring and improving the quality and availability of health care services.

INFECTIOUS DISEASE IN THE 21st CENTURY

Bioterrorism is a serious concern for the 21st Century. It is certain to affect how medicine is practiced in South Dakota, as well as the rest of the country. **Dr. Wendell Hoffman** specializes in the area of infectious diseases and will give insight to this potentially lethal arena which demands physician attention.



Wendell W. Hoffman, MD
Sioux Falls, SD

ECONOMIC CREDENTIALING - EXCLUSIVE CREDENTIALING: HOW TO PREVENT SUCH ABUSES WITH MEDICAL STAFF BYLAWS

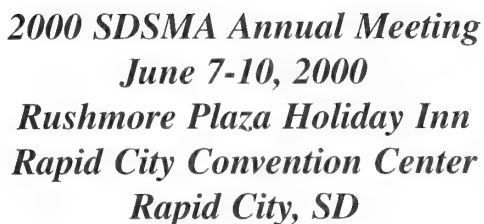
Dr. Howard Lang explores the definition of economic/exclusive credentialing and how to insure that it does not infiltrate medical staff bylaws. Dr. Lang has extensive experience in medical staff-hospital relations and has written medical staff bylaws nationwide, including model medical staff bylaws for the Medical Association of the State of Alabama. He has made numerous presentations on a number of subjects including; medical staff reengineering, medical staff self-governance, exclusive contracting, fair hearing procedures, and economic credentialing.



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Facts And Fallacies About Varicella And The Varicella Vaccine

Archana Chatterjee, MD, PhD; Helen Beckman Fiechtner, PharmD; Sarah Patrick, MPH, PhD

ABSTRACT

Varicella is a nearly ubiquitous infection that results in significant morbidity and occasional mortality. The varicella vaccine has been licensed in the United States for the past five years. While varicella vaccination rates are slowly growing nationally, the immunization rate for South Dakota remains abysmally low. The legislature has recently mandated this vaccine for school entry in South Dakota, to promote its increased use. There are many fallacies about varicella and the varicella vaccine and questions about how new requirements of varicella vaccination before school entry will be met. This article identifies these common misconceptions and can serve as a resource for answers to questions commonly asked of vaccine providers.

INTRODUCTION

Routine childhood immunization against measles, mumps, rubella, pertussis, diphtheria, tetanus, polio and *Haemophilus influenzae* type b have resulted in the virtual disappearance of these types of childhood infections in the United States. The story is different for varicella, an almost ubiquitous infection, which results in significant morbidity and occasional mortality, and for which a safe and effective vaccine has been licensed in the United States for nearly five years. This article addresses the common misconceptions about varicella and the varicella vaccine. Resources for questions regarding the implementation of the new mandate for varicella vaccination at school entry are also provided.

Fallacy: Varicella is a benign childhood disease that all children must endure as a "rite of passage."

Facts: Varicella is a common, highly contagious disease that infects nearly the entire unimmunized birth cohort. Before licensure of the varicella vaccine in 1995, approximately four million cases occurred annually in the United States, with 150,000 to 200,000 complications, 10,000 hospitalizations and 100 deaths.^{1,2} Children bear the brunt of this disease, with more than 90% of infections, two thirds of varicella-related hospitalizations, and nearly half of the varicella-related deaths occurring in children.^{1,2} Due to its changing epidemiology, the highest incidence of infection has shifted from children aged five to nine

years, to those one to four years of age.^{3,4} Serious complications include secondary bacterial infections, pneumonia, central nervous system involvement, fulminant hepatitis and disseminated intravascular coagulation. Several recent cases in the region with these types of complications have been reported in the media. Rash illness outbreaks (including varicella) are investigated by the State Department of Health and should be reported within 24 hours of suspicion via disease reporting mechanisms (605) 773-3737 during business hours. At other times, providers can call 1-800-592-1861, or the on-call cell phone (605) 222-3511. These reports are particularly important because post-exposure prophylaxis can be offered, and is recommended within a very narrow window of time.

Fallacy: The varicella vaccine is not effective in preventing clinical varicella.

Facts: In both pre-licensure and post-licensure studies, the varicella vaccine has been shown to be highly effective. The efficacy for preventing varicella ranges from 70%-90% and for preventing moderate to severe disease from 95%-100%.⁵⁻⁸ Following exposure to wild-type varicella-zoster virus (VZV), "breakthrough" disease occurs in 1%-4% of vaccinees per year.⁹ Importantly, the rate of "breakthrough" disease does not seem to increase with length of time after immunization, is usually of short duration and mild, with fewer than 50 lesions and low-grade or no fever.

Fallacy: Varivax® (varicella virus vaccine live Oka/Merck) is not the same vaccine as the one used in Japan, and therefore we cannot use any of the information gathered from the Japanese experience.

Facts: Varicella vaccines in Japan, Europe and the United States all use the Oka attenuated varicella virus strain developed by Dr. Takahashi and colleagues of Japan in the 1970's. The virus was recovered from a varicella lesion on a Japanese boy with the last name of Oka, and from this virus the Oka attenuated virus strain was developed.^{10,11} The varicella vaccines manufactured by different companies may vary in the method of virus propagation, amount of plaque-forming units (potency), suspending fluid, preservatives and stabilizers used to make the vaccine into a pharmaceutical product.¹² The various Oka derived varicella vaccine products are not identical, but are very similar. Many clinical studies looking at safety and efficacy have been done and surveillance studies continue to be done on the Oka/Biken, Oka/RIT and Oka/Merck strains. These studies used various potencies of the varicella vaccines. To date, the adverse reaction profile of the Oka/Merck product is similar to the other Oka vaccines.¹³ Since the same Oka virus is being used in all of the varicella vaccines, surveillance of the duration of immunity from the Oka Japanese product should be able to be used in answering questions about future booster vaccinations for the Oka/Merck vaccine.

Fallacy: Aborted fetuses are routinely used to manufacture Varivax®.

Facts: Human diploid fibroblast cell lines are used to produce several different vaccines. Human diploid cells are immature cells that can be grown indefinitely and readily support viral growth. Currently, there are two human diploid cell lines in use, WI-38 and MRC-5. Both of these cell lines were developed from lung tissue of two therapeutically aborted fetuses in 1961 and 1966. The medical reasons for the abortions were independent decisions unrelated to the production of the human diploid fibroblast cells or vaccines. All human diploid cells used in the past and today for vaccine production come from the WI-38 and MRC-5 cell lines.¹⁴ Dr. Takahashi and colleagues developed the Oka master seed virus and from this the various varicella vaccines are produced.^{10,15}

Fallacy: Immunity from the vaccine will not be long lasting, resulting in a cohort of adults at risk for serious varicella disease.

Facts: Follow-up evaluation of children during prelicensure clinical trials in the United States revealed protection for at least 11 years, and studies in Japan indicated protection for at least 20 years.^{16,17} The experience with other live virus vaccines with a longer track record, such as measles or rubella, suggests that

immunity remains high throughout life. There are ongoing clinical trials in children to determine the need, if any, for additional doses of varicella vaccine. It is true that as the use of varicella vaccine increases, the circulation of wild-type VZV will decrease, and the likelihood that children unexposed to natural infection and unimmunized will enter adolescence and adulthood lacking immunity will also increase. However, mathematical models predict that with greater than 90% varicella vaccine coverage in children (universal vaccine use), the disease burden will decrease for both children and adults, although a greater proportion of cases will occur at older ages.¹⁸ If, on the other hand, immunization rates for children remain low (selective vaccine use), the prophecy of creating a cohort of adults at risk for serious varicella disease will surely be fulfilled.¹⁹

Fallacy: The varicella vaccine can cause severe reactions, including clinical varicella.

Facts: Varicella vaccine has an excellent safety record. Reactions are generally mild, occurring in 5%-35% of vaccinees.²⁰ Minor injection site reactions such as pain, redness and swelling occur in 20% of vaccinees, while 3%-5% of children develop a localized rash and a further 3%-5% will develop a generalized varicella-like rash. Rashes typically consist of 2-5 lesions, and are maculopapular rather than vesicular. It is interesting to note that most varicella-like rashes that occur within two weeks after vaccination are due to wild-type VZV.²¹ A temperature higher than 102° F has been reported in 15% of vaccinated children as well as placebo recipients, within 1 to 42 days after injection, and is not considered a significant adverse event of immunization.⁶ Low-grade fever (100°F) has been reported in 10% of adolescents and adults. While there have been temporal associations of varicella vaccine with serious adverse events such as encephalitis, ataxia, erythema multiforme, Stevens-Johnson syndrome, pneumonia, thrombocytopenia, seizures, neuropathy and death, a causal association has not yet been proven. Varicella vaccine is contraindicated in pregnant women. The Varivax Pregnancy Registry has been established by the vaccine manufacturer in collaboration with the CDC, to monitor maternal and fetal outcomes of women who are inadvertently immunized with varicella vaccine within three months or less before pregnancy or anytime during pregnancy. Currently, the registry contains data from more than 300 deliveries, indicating no defects compatible with congenital varicella syndrome.²⁰

Fallacy: The varicella vaccine can cause herpes zoster.

Facts: A well-known sequela of chicken pox is herpes zoster later in life, due to the inherent latency of VZV. At least in immunocompetent children, the age-

specific risk of herpes zoster seems to be lower with varicella vaccine than in those who have had natural varicella - 2.6 per 100,000 vaccine doses distributed (CDC, unpublished data, 1998) vs. 68 per 100,000 person-years after natural varicella infection.²² These data should, however, be compared with caution, since the former represent passive surveillance after immunization, while the latter reflect an actively monitored population. It should be noted that wild-type VZV has been isolated from cases of herpes zoster in immunized persons, reflecting antecedent natural infection. A multi-center clinical trial of a more potent version of the vaccine is currently being conducted by the vaccine manufacturer, the Department of Veterans Affairs and the National Institute of Allergy and Infectious Diseases, to determine its efficacy in preventing herpes zoster in adults. The study will last about five years, will have 37,000 subjects, one-half of whom will receive placebo.

Fallacy: Vaccinees can easily transmit this virus to unimmunized individuals.

Facts: More than 14 million doses of varicella vaccine have been distributed since licensure in the United States. Only three well-documented cases of transmission of vaccine-strain virus have been reported, and these have all occurred when the vaccinee developed a vesicular rash (Merck and Company, Inc., unpublished data, 1999).

Fallacy: Varicella vaccine is difficult to store and handle.

Facts: Due to its temperature sensitivity, the vaccine must remain frozen at (-15°C or +5°F or colder) during shipping and while stored in the provider's office. Storage in a refrigerator rather than a freezer is allowed for only three days. Refrigerator-stable vaccines are currently under investigation. However, until such vaccines become available, freezer storage is a must to ensure potency. The State Department of Health is willing to work with individual vaccine providers who may not have a freezer in their office, to ensure adequate storage of the vaccine. Letters to vaccine providers with instructions on testing freezer temperatures have been sent out. If assistance is needed to document or review storage capacity, contact Lori Koenecke, RN, Director, Immunization Program, South Dakota Department of Health, (605) 773-5323, or lori.koenecke@state.sd.us. While the need for storage in a frozen state may impose a burden on some providers, the benefits of the vaccine far outweigh the inconvenience.

Fallacy: The varicella vaccine is too expensive.

Facts: Cost-benefit analyses of varicella vaccine programs in the U.S. and in other countries have shown that when direct medical and indirect societal costs were

considered, these programs proved to be cost-beneficial for healthy young children.²³⁻²⁵ It should be noted that the two American studies were based on morbidity and mortality data from the 1980's and cost data from 1990. Due to rising numbers and costs of deaths and hospitalizations due to varicella, analyses based on current data would likely demonstrate a more favorable cost-benefit ratio. A recent set of studies from Canada illustrates the large annual economic burden of varicella.^{26,27} The CDC estimates that for every dollar spent on the vaccine, \$5.40 is saved in direct and indirect expenses (1996 analysis). The current burden of the cost of vaccine is borne by the parents in South Dakota, unless it is paid for by health insurance or Medicaid/other federal programs, and ranges from \$62 to \$100 per dose. With the addition of varicella vaccine to the state-supplied list, the cost to parents will only be for administration, ranging from \$5 to \$12.

Fallacy: Nationwide immunization rates are no different than for South Dakota, and this vaccine is not required for daycare/school entry in most states.

Facts: South Dakota has one of the lowest varicella immunization rates in the nation, with only 19% of its 19 to 36 month olds immunized, compared to the national average of 52%, and rates in neighboring states ranging from 36% in North Dakota to 46% in Minnesota (CDC 1998-1999 National Immunization Survey). Twenty-one states (including South Dakota) and Washington, DC, have already approved the requirement for varicella vaccine for daycare and school entry. There is pending legislation on this matter in four other states.

Fallacy: All children entering kindergarten in South Dakota this year will need to be immunized in August.

Facts: It is estimated that 38% of the children entering kindergarten in South Dakota this year will have already been infected with chicken pox. Up to 19% more will have received the varicella vaccine. Special immunization clinics to help the remaining incoming kindergarten class receive the necessary immunizations before school entry will be organized throughout the state this summer. As with any childhood immunization, the South Dakota Immunization Information System (SDIIS) may be used to determine if a child in your practice has previously been immunized. To find out when clinics are scheduled in your area, or to learn more about SDIIS, please call Lori Koenecke at (605) 773-5323.

RECOMMENDATIONS FOR VARICELLA VACCINE USE

The CDC's Advisory Committee on Immunization Practices, the American Academy of Pediatrics, and the American Academy of Family Physicians recommend

that all children be routinely vaccinated for chicken pox at 12 to 18 months of age, and that all susceptible children receive the vaccine before their 13th birthday.²⁸ Susceptible individuals are those who have not had chicken pox in the past. It should be noted that inadvertent vaccination of a person who has had natural varicella in the past is unlikely, but harmless. Susceptible individuals 13 years of age or older should receive two doses of the vaccine, given at least four weeks apart.

The following are new recommendations from the American Academy of Pediatrics Committee on Infectious Diseases:²⁰

1. HIV-infected and other children with altered immunity. Children with impaired humoral immunity may be immunized with varicella vaccine. Persons with cellular immunodeficiencies, including leukemia, lymphoma, other malignancies affecting the bone marrow or lymphatic systems and congenital T-cell abnormalities should not routinely be vaccinated with varicella vaccine. Children with acute lymphocytic leukemia may receive vaccine through a research protocol. Varicella vaccine should be considered for HIV-infected children in CDC class I (CD4⁺ T-lymphocyte percentage of 25% or more) with mild or no signs or symptoms.
2. Postexposure immunization. When given to contacts within three days of the appearance of rash in the index case, varicella vaccine may be effective in preventing or modifying varicella. When used within 36 hours after exposure to varicella in a setting where close contact occurred, varicella vaccine was 95.2% effective for prevention of disease and 100% for prevention of moderate or severe disease.²⁹

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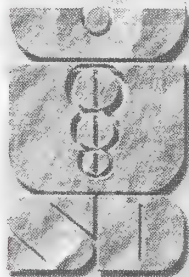
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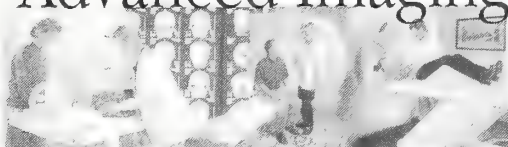
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- May 16 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- May 16 **Endorama (Endocrinology Conference)** - 7:30AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Michelle Peters - 357-1366.
- May 16 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- May 17 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- May 17 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- May 17 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- May 18 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- May 18 **Grand Rounds** - 6:30PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- May 18 **Neuroscience Grand Rounds** - 8:00AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- May 18 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.
- May 19 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- May 20 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- May 22 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- May 23 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- May 23 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- May 23 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 23 **USDSM Audio Conference** - 11:00AM (CST)/10:00AM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 23 **USDSM Audio Conference** - 10:00PM (CST)/9:00PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 24 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- May 24 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- May 24 **USDSM Audio Teleconference** - 12:00PM (CST)11:00AM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
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- May 25 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- May 25 **Cardiovascular Conference** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- May 25 **Trauma Grand Rounds** - 12:00PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- May 25 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.

- May 25 **USDSM Audio Teleconference** - 11:00AM (CST)/10:00AM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- May 26 **Tumor Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- May 27 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- May 30 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- May 31 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- May 31 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.

JUNE

- June 1 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- June 1 **Grand Rounds** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- June 1 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.
- June 1 **USDSM Audio Teleconference** - 12:00PM (CST)/11:00AM (MST); Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
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- June 2 **Morbidity/Mortality Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- June 2 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- June 2 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- June 3 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- June 6 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- June 6 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- June 6 **USDSM Audio Conference** - 11:00AM (CST)/10:00AM (MST); Speaker: Alan F. Schatzberg MD; Topic: Optimizing and Assessing Pharmacologic Treatment of Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
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- June 6 **USDSM Audio Conference** - 1:30PM (CST)/12:30PM (MST); Speaker: Kathleen Pritchard, BA, MD, FRCPC, FACP; Metastatic Breast Cancer Treatment Options; Info: Lynn Thomason - 357-1480.
- June 6 **USDSM Audio Conference** - 2:30PM (CST)/1:30PM (MST); Speaker: Kathleen Pritchard, BA, MD, FRCPC, FACP; Metastatic Breast Cancer Treatment Options; Info - Lynn Thomason - 357-1480.
- June 6 **USDSM Audio Conference** - 7:00PM (CST)/6:00PM (MST); Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
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- June 7 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- June 7 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- June 7 **Internal Medicine Grand Rounds** - 7:30AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- June 7 **Internal Medicine, Tumor Conference** - 8:00AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- June 7 **USDSM Audio Teleconference** - 9:00PM (CST)/8:00PM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

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- June 7 **USDSM Audio Conference** - 12:30PM (CST)/11:30AM (MST); Speaker: Kathleen Pritchard, BA, MD, FRCPC, FACP; Metastatic Breast Cancer Treatment Options; Info - Lynn Thomason - 357-1480.
- June 8 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- June 8 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.
- June 8 **USDSM Audio Conference** - 8:00PM (CST)/7:00PM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 9 **Pathology Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- June 10 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- June 12 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- June 12 **Clinical Pathology Conference** - 8:00AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- June 12 **USDSM Audio Conference** - 2:30PM (CST)/1:30PM (MST); Speaker: Alan B Sandler MD; Topic: Topoisomerase 1 Inhibition - Small Cell Lung Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- June 13 **CPR Certification/Recertification** - 7:00PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- June 13 **Geriatric Forum** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- June 13 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- June 13 **USDSM Audio Teleconference** - 10:00PM (CST)/9:00PM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 13 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 13 **USDSM Audio Conference** - 8:00PM (CST)/7:00PM (MST); Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 14 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- June 14 **Internal Medicine Grand Rounds** - 7:30AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- June 14 **Geriatric Grand Rounds** - 12:00PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- June 14 **USDSM Audio Teleconference** - 12:00PM (CST)/11:00AM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 14 **USDSM Audio Teleconference** - 1:00PM (CST)/12:00PM (MST); Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 14 **USDSM Audio Conference** - 12:30PM (CST)/11:30AM (MST); Speaker: Alan B Sandler MD; Topic: Topoisomerase 1 Inhibition - Small Cell Lung Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- June 14 **USDSM Audio Conference** - 2:00PM (CST)/1:00PM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 14 **USDSM Audio Conference** - 7:00PM (CST)/6:00PM (MST); Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 15 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- June 15 **Grand Rounds** - 6:30PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- June 15 **Neuroscience Grand Rounds** - 8:00AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- June 15 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.
- June 15 **USDSM Audio Conference** - 8:00PM (CST)/7:00PM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

- June 16 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- June 16 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- June 17 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- June 20 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- June 20 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- June 20 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 20 **USDSM Audio Conference** - 10:00PM (CST)/9:00PM (MST); Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 21 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- June 21 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- June 21 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- June 21 **USDSM Audio Teleconference** - 11:00AM (CST)/10:00AM (MST); Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
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- June 21 **USDSM Audio Conference** - 7:00PM (CST)/6:00PM (MST); Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- June 22 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- June 22 **Cardiovascular Conference** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- June 22 **Trauma Grand Rounds** - 12:00PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- June 22 **Pediatric Grand Rounds** - 8:00AM; Sioux Valley Info: Larry Wellman - 333-7178.
- June 22 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.
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- June 27 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
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- June 28 **Physician Grand Rounds - 12:00PM;** Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- June 28 **Internal Medicine Grand Rounds - 7:30AM;** Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- June 28 **USDSM Audio Conference - 9:00PM (CST)/8:00PM (MST);** Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
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- June 29 **Cancer Conference - 12:00PM;** Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8061.
- June 30 **Physicians Continuing Education - 7:30AM;** Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.

MISCELLANEOUS

MAY 2000

- May 15-20 **The 6th World Biomaterials Congress and Exposition,** Hilton Waikoloa Village Resort, Kamuela, HI. AMA Category 1 credit avail. Society for Biomaterials USA, 13355 – 10th Ave,N, Ste 108, Mpls, MN 55441. Phone: 612-543-0908. Fax: 612-545-0335.
- May 16-17 **The 14th Annual South Dakota Rural Health Conference, “Technology, Traditions, Transition,** Ramkota Convention Ctr, Pierre, SD. AMA Category 1 credit avail. Contact: Lisa Kilawee, USD School of Med, Sec of Rural Health, Dept of Family Med, 1400 W 22nd St, Sioux Falls, SD 57105-1570. Phone: 605-357-1508. E-mail: lkilawee@usd.edu.
- May 19 **New Treatment Options for Depression and Anxiety,** Radisson Encore Inn Hotel, Sioux Falls, SD. 6.5 hrs AMA Category 1 credit. Info: Kate Naylor, USD School of Medicine, Dept of Psychiatry, 1400 W. 22nd St, Sioux Falls, SD 57105-1570. Phone: 605-357-1585.
- May 21-24 **The 11th Annual Congenital Heart Disease in the Adult,** Stevenson, WA. AMA Category 1 credit avail. American College of Cardiology, Extramural Programs Dept, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 695. Fax: 301-897-9745.

JUNE 2000

- Jun 8-10 **Pediatric Cardiac Catheterization Update - 2000: Current Techniques, Complication Management, and Case Presentation,** Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. Am College of Cardiology, Heart House Learning Ctr, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 652. Fax: 301/897-9745. Internet: www.acc.org.
- Jun 8-10 **Practical Diagnostic Hematopathology: Non-Neoplastic Hematologic Diseases with Emphasis on Red Blood Cell Disorders Conference, Honoring Virgil F. Fairbanks, MD,** Mayo Foundation, Rochester, MN. Fee: \$480. 15.5 AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 First St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507-284-0532. Internet: www.mayo.edu.
- Jun 14-16 **Annual Advances in Clinical Pediatrics,** Rushmore Plaza Holiday Inn, Rapid City, SD. Fee: \$350. 13 hrs AMA Category 1 credit. Contact: Dr. Larry Wellman, SD Children's Specialty Clinics, 1100 S. Euclid Ave, Sioux Falls, SD 57105-0411. Phone: 605/333-7178. Fax: 605/333-1585.
- Jun 22-24 **Strategies for Success IX: The Practice Management Conference for Cardiovascular Specialists,** Southampton, Bermuda. AMA Category 1 credit avail. Am College of Cardiology, Extramural Programs, 9111 Old Georgetown Rd, Bethesda, MD 20897-1448. Phone: 800/253-4636, ext 695. Fax: 301/897-9745. Internet: www.acc.org.
- Jun 23-25 **Frontiers in Endourology: 2000 Laparoscopic Urologic Oncology,** EPN Ed Ctr, Washington Univ Med Ctr, St. Louis, MO. Fee: \$2,400. 25.5 hrs AMA Category 1 credit. Washington Univ, CME-WUSM, Campus Box 8063, 660 S. Euclid Ave, St. Louis, MO 63110. Phone: 314/362-6891. Fax: 314/362-1087. Email: cme@msnotes.wustl.edu. Internet: www.wustl.edu.



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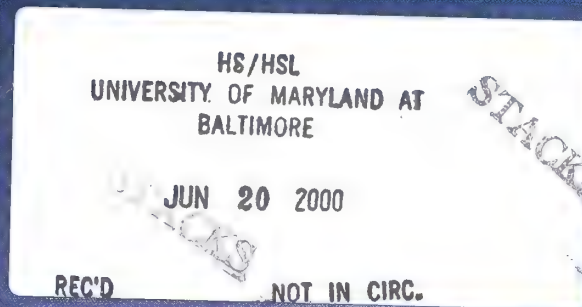
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SOUTH DAKOTA

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Volume 53 Number 6

JOURNAL of MEDICINE

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Trust Your Heart to the Leader



Kathleen R. Kearney, MD

It is with great pleasure that we welcome Kathleen R. Kearney, MD to Heart Partners. Dr. Kathleen Kearney received her medical degree from the Medical College of Georgia in 1990. She completed her residency in Internal Medicine at the University of Kentucky Medical Center, completed a fellowship in Cardiology and Clinical Scholar Year in Echocardiography at the University of Kentucky. Dr. Kearney is board-certified with the American Board of Internal Medicine and American Board of Cardiology.

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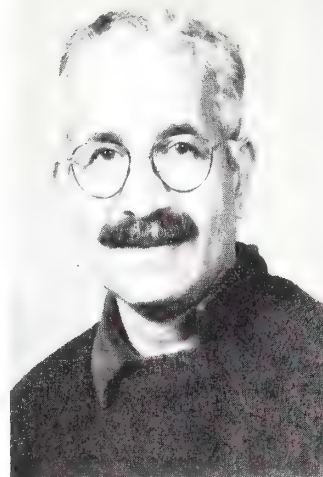
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- Kevin Patrick, patient's father



Rif' At Hussain, MD, FACS

"Dr. Hussain performed five surgeries on my son. He really cares for his patients and develops a trusting relationship with them. I have a lot of respect for him and all that he has done for my son."

- Darryl Erlandson, patient's father

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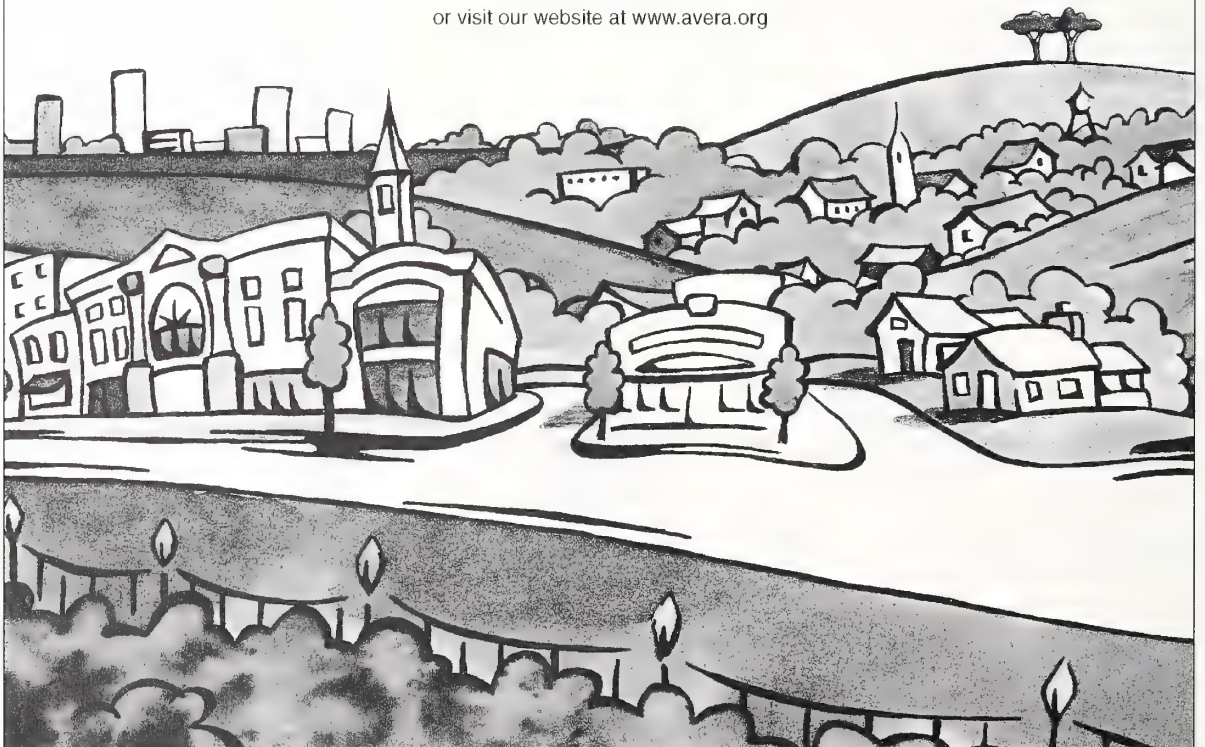
*"WE MUST CARE FOR PEOPLE IN SUCH A WAY,
that, whether or not we can physically cure their illness,
they find STRENGTH and COMFORT in knowing GOD'S ABIDING LOVE for them,
despite their experience of chaos."*

*Excerpt from a pastoral letter on healthcare
by Joseph Cardinal Bernardin, former Archbishop of Chicago*

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This photo of an old South Dakota country schoolhouse was taken by professional photographer Greg Latza, Sioux Falls

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

At the April 14, 2000, SDSMA Council meeting, Chairman Robert Raszkowski led the members through an exercise to identify the most important objectives of the Medical Association. A total of 45 ideas were put on the table and through a winnowing process, six objectives rose to the top. Here are the six most important objectives of the SDSMA for the next three years.

Strengthening political activism finished in a tie for first place. The bad news is that physicians are weary of constant battles in the legislature, but the good news is we do know what is necessary.

- A. Each district should meet with its local legislators prior to the session.
- B. At least some physicians in each district should have an established channel of communication with their legislators.
- C. Physicians need to financially support the South Dakota Medical Political Action Committee.

Doing these three things on a year-in, year-out basis should solve our political problems. Best of all, these are things that can be done in an efficient manner on a scheduled basis.

Tied for first place is improving relations between physicians and the public. If political activism is a short-term answer, this is a long-term answer. The good news is that physicians are eager for this, but the bad news is we are really not sure how to go about it. Taking care of individual patients in a thoughtful and compassionate manner is not enough. I believe physicians already do this, and yet we see shortcomings in our public image. Dr. K. Gene Koob has appointed a small task force to look at this issue. This task force report will be the subject of much discussion during the coming year.

The third charge is to promote and increase member involvement. There are three ways to accomplish this goal.

- A. Officers and councilors have to identify physicians who have an innate interest in serving on a commission, as a delegate, or on the political action committee.
- B. District presidents should focus the district meetings, for the most part, on socioeconomic and public health topics. The first step toward involvement is education.
- C. A good state meeting in June increases involvement. We have been very fortunate over the past few years. Dr. Kenneth Aspaas and his commission have put on superlative presentations.

The fourth objective is for the Medical Association to be a resource for physician education in the non-clinical sense. This means education regarding insurance contracts, use of the Internet, financial information, and fraud issues. This is one area where the Medical Association has done a good job. There have been special programs over the years, including Dr. Richard Holm's sessions on E & M Coding, Dr. Howard Lang's sessions on economic credentialing, and sessions on political activism. If you have suggestions for program topics please let the staff or officers know.

The fifth objective is to support student involvement. Dr. Rod Parry and Dr. James Engelbrecht have led this charge. Currently, all of the medical students are sponsored for four years with a membership in the South Dakota State Medical Association and the American Medical Association. Funds are allocated for meetings for student representatives and the student councilors are allowed to vote at the Council meetings. Dr. Engelbrecht is pressing for a resident physician section as well. The role of the Medical Association should be to get out of the way and not stop the momentum.

(Continued on Page 226)



Karen Waltman, President
South Dakota State Medical Association Alliance

As the incoming president of the South Dakota State Medical Association Alliance, I am committed and honored to lead and represent this organization. I will do so with the highest level of dedication and fortitude, which is the cornerstone of our medical family, while maintaining our position as “physicians’ spouses dedicated to the health of America.”

Over the last 90 years this organization in South Dakota and across the country has grown to meet the ever-changing health and safety needs of our communities, while networking with other physicians’ spouses. Throughout the years each president has left her mark on what the organization stands for today. We are truly the benefactors of their personal gifts of time and talent. All of the past board members have also volunteered and helped the goals of this organization to move forward. I have had the opportunity to get to know many of these outstanding leaders. Each and every one has displayed a life long passion of support for the Alliance. Their determination to work diligently to further the aims of the American Medical Association and Alliance is to be commended. Together we will celebrate our 91st year as “the oldest, continuous Medical Association Auxiliary in the United States.”

As president-elect I had the honor of working closely with Ronda Stensland, the 1999-2000 SDSMA Alliance president. As one of my mentors in the Alliance, she shared her insight and recommendations for the organization. She led with the tenacity and drive of a spirited individual who truly wanted to make a positive difference in the lives of those she touched across South Dakota. Every Alliance member counted, every project was notable, and every idea was considered. Thus she received the support and respect from the Alliance membership across the state. Our lives have been enriched by her knowledge and enthusiasm; and thousands have been positively affected by the Alliance programming during her presidency. Ronda, congratulations on a job well done.

As my tenure as president begins, I am struck with one overwhelming thought - to continue the lifeline of the organization with the integrity and character of those preceding me. This foundation solidifies my position to put my best foot forward in our effort to take this organization to the next level. The Alliance Challenge 2000 will help us to do just that. Recently announced at our state convention, the involvement and participation of an “Alliance Leaders Team” will be utilized. This team of experienced Alliance members will address membership needs, health project support, leadership skill development and many positives of networking throughout the state. The SDSMA Alliance wants to help each and every district develop its fullest potential. You will also be hearing more about the Adopt-A-School Initiative, Friends of the Legacy, Health Check, Member Recognition, and AMA Foundation fundraising projects in upcoming issues.

The district, state and national levels impact the productivity of our organization. Remember, the Alliance is the only national organization committed to public health and safety. Critical issues impacting the communities in which we live, such as violence, health care legislation, and assisting the medically underserved, are addressed by this organization. Programs and projects are developed with the help of our national office and disseminated by our state leaders to be put into action in our communities. Federated membership makes all of this possible.

My thanks to all of you for your continued support of this worthwhile organization. We are in this together and will continue to be advocates for America’s health.

The final objective is to promote public education, especially in preventive health care. The Association has generally supported preventive health care bills, such as the one regarding varicella immunizations during the last session of the legislature. However, our stand against adding mandates to insurance contracts, including those mandates regarding preventive health, has confused some of the public. This whole issue will be grist for the councilors' mill during the coming year.

These are the worthwhile goals laid out by your elected representatives. I would encourage your efforts to support and help accomplish them all.

Stephen H Gehring

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About Our New President

Stephen H. Gehring was born and raised in Louisville, Kentucky. He attended Georgetown University and went to Medical School at the University of Kentucky. After an internship at Presbyterian University of Pennsylvania Hospital in Philadelphia, Dr. Gehring served 2 ½ years in the United States Navy. His surgical residency was completed at Washington University in St. Louis, and he completed his urology residency at the University of Louisville. Dr. Gehring met his wife, Susan, in Philadelphia and the two were married in 1970.

Dr. Gehring came to South Dakota after placing an ad in the Riker Service, which was a classified ad newspaper for physician employment that was commonly used at the time. He has lived and worked in South Dakota since 1975.

Dr. Gehring and his wife have two sons, Stephen W., who works in information technology in Washington, D.C., and James who is a medical student at the University of South Dakota. His favorite hobbies include fishing, duck hunting and camping. "My wife's hobby is going on cruises, so I do that, too."

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Adhesive bandage, which plaintiff alleges
defendant pulled rapidly from skin, violently tearing three
inches from plaintiff's arm, which resulted in severe shock,
trauma, disfigurement, chronic debilitating pain and
permanent psychological damage.

The Physician As Hero

From the dawn of time, humans have demonstrated an instinctive affinity for the epic tale. George Lucas has skillfully recognized and nurtured this appeal in his Star Wars series. Like all great epics, Lucas' narratives succeed in portraying monumental struggles between the forces of good and evil.

One measure of Lucas' success is the high regard he was accorded by the renowned teacher, Joseph Campbell. For many, Campbell is best known for the series of interviews he did with Bill Moyers (subsequently published in the book, *The Power of Myth*). During his lifetime, Campbell was regarded as the preeminent authority on mythology and its relationship to modern society. He pondered the meanings of ritual and spirituality that are inextricably woven into human culture. And he loved the Star Wars series.

In his writing and teaching, Campbell was very interested in the concept of the hero.¹ He believed that "the hero symbolizes our ability to control the irrational savage within us." He noted that it is the nature of the hero to have a journey and that this quest must not be for oneself but for "the wisdom and the power to serve others." The hero generally makes sacrifices to achieve this goal. Campbell talks about "a truly heroic transformation of consciousness" that takes place as the hero is subsumed into a noble enterprise. Invariably, this quest is larger than the individual who is striving for a common good.

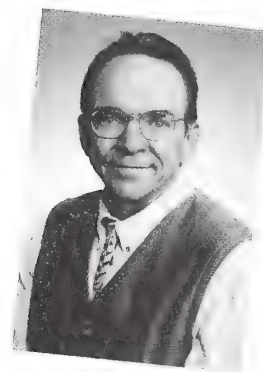
It occurs to me that Campbell's notions of heroism can be readily applied to the role of the physician. Specifically, I think that it is laudable and appropriate for practicing physicians to strive to be heroic in the performance of their duties. In many ways, the practice of medicine offers a straightforward way to become heroic. Medicine presumes self-sacrifice for the good of patients and the medical profession can certainly provide the physician with both the wisdom and the power to be of service to others. Insofar as this is the very nature of medical practice, it may be easier for a

physician to be heroic than for persons in many other occupations. The very fact that serious illness renders a patient vulnerable and dependent upon the physician may also add to the perceived heroic stature of the physician in the course of illness treatment.

The critical question, it seems to me, is whether a caregiver commits to striving for an heroic stance or becomes content with less lofty goals. At the beginning of Dickens' *David Copperfield*, a young boy wonders "whether I shall turn out to be the hero of my own life."² I believe this same query is appropriately pondered by physicians. While we have it in our power to conceive of our work as a noble quest, such an orientation is not an invariable component of all medical practices. It is certainly possible for a physician to emphasize the business aspects of medical practice as opposed to the service nature of it.

Unfortunately, having the possibility of heroism virtually built into the nature of medicine puts physicians at some risk of not meeting society's expectations. It seems beyond dispute that many patients and family members are unhappy with the medical profession. Sometimes these attitudes are beyond our control as people try to cope with the devastations of illness. However, I think we all hear of other instances in which the public is put off by the imperious nature of a physician or by perceived aloofness, greed, or lack of personal concern for the patient.

One of the recurring themes in Star Wars has to do with the temptations that confront the powerful. The allure of the "dark side" is keen and some warriors in Star Wars succumb. The physician, too, may fall victim to influences that detract from the healing mission. Debate may exist as to when this occurs. If one thinks of the physician as primarily an entrepreneur, the constraint of market forces might reasonably dominate physician behavior. On the other hand, it has been suggested by Crawshaw, et al., that medicine is "at its center, a moral enterprise grounded in a covenant of



trust.”³ This formulation sounds very much like Campbell’s notion of the hero who uses wisdom and power to serve others. It implies an invitation to the physician to strive for an heroic demeanor in the daily work of caregiving. Arguably, the key to both heroism and physician duty is service. It is what we do when we are at our best.

Jerome W. Freeman, MD
Editor

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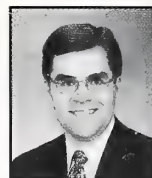
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Extenuating Circumstances

A periodic column of personal, ethical, and socioeconomic reflections on medicine.

In Memory Of A Country Doctor*

Anthony Petres; Rapid City, SD

The car horn shattered an early spring morning stillness in the small South Dakota town. Alone and inside the car on the front seat, a mother was in the final stages of a normal but rather sudden infant delivery. With each new birthing contraction, the helpless woman sounded the car horn; in part signaling the husband to quickly return, in part an involuntary convulsion to her mounting labor pains. The couple had been en route to the hospital, but nature had inserted a last-minute change of plans. Instead of a city hospital, they had reached my father's driveway and could go no further. The baby girl had decided the doctor's front drive was good enough for her. Nothing fancier would be required.

Through the eyes of a sleepy ten-year-old, the repeating horn blasts were enough to signal something quite out of the ordinary was taking place. I watched my father, wearing a hastily chosen combination of a pajama top and street trousers, head out the front door to deliver the little girl, right there in front of our house. Close behind, my mother followed with a stack of clean towels. The delivery was over in a moment and what followed was a scene so bizarre it could only be true. The doctor, dressed in his comic wardrobe, took the tiny but healthy infant swaddled in a bath towel on its first automobile ride. He fired up his cold 1961 Chevrolet Corvair, and with baby in one arm, drove off to his clinic for the required post-delivery care, (followed closely by the parents).

As things slowly returned to normal and I dressed for school, I smiled as I realized again there were certain intangible benefits in being a small town doctor's kid. Sometimes, I had the kind of stories to tell my fifth grade schoolmates that simply could not be matched.

As a physician in rural South Dakota, my father, Dr. Anthony Petres, was a man of many stories in his own right. By today's standards, his version of medical practice harkened back to earlier, less complicated times. To my father (and his contemporaries), the practice of medicine was perhaps more of an art form than the world would allow today's physicians. Consider his times. Born in 1907 in a small village in the mountains of eastern Hungary into a European world that was still defined by the Victorian age. Despite the

arrival of the twentieth century, these were in reality nineteenth century horse and buggy days; the waning of the Austro-Hungarian Empire. My father began his schooling in an era during which monarchies and royalty still dominated nations in Europe. Then would come the First World War, and the beginning of the political and technical changes around which the twentieth century would spin. Technology that would eventually bring airplanes, automobiles, nuclear powered propulsion and space travel. In medicine, advances would bring antibiotics, inoculations, and cures for deadly disease. The young boy from the Carpathian Mountains was destined to see times of more significant change in the human condition than in all of previous history combined.

Perhaps it was the optimism of the new century that helped inspire my father to seek a profession that was so full of promise and revolutionary change. As soon as he could, he would leave the rural village of his birthplace to study medicine in Budapest. His life journey which would take him ever westward, had begun.

The year 2000 marks the eighth year since my father's passing. His death in 1992 concluded a medical career spanning more than 50 years, the majority spent on the South Dakota landscape. So much had happened since the day in 1950 when he and the family had arrived by train in Sioux Falls.

Of all the images of my father that I am left with, perhaps the most frequent is of a moment that I actually did not witness, as it happened before my time. But, I can clearly imagine that day in 1950 when the little family, headed by the Doctor, anxiously disembarked the Milwaukee Road train in Sioux Falls, and collected their few belongings in the empty depot. The passenger train, like the artful country Doctor, each a symbol of a bygone era, both gone, but not forgotten.

AUTHOR

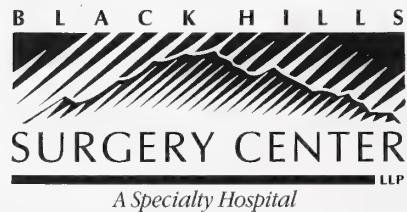
Anthony Petres is a geologist and amateur writer residing in Rapid City.

**Excerpts from a longer manuscript, *Memories of a Country Doctor*.*



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Drug Interactions And The Cytochrome P-450 System

Jennifer J. Menke, PharmD; Sioux Falls, SD

July 14, 2000, is the date that marks the demise of another popular drug. On that date cisapride (Propulsid by Janssen) will be removed from the market. This drug, which was approved for the treatment of gastroesophageal reflux, has been associated with many reports of arrhythmias including 80 deaths. Many of these deaths/arrhythmias occurred in people who had risk factors such as an underlying condition known to increase the risk of arrhythmia or the concomitant administration of drugs known to interact with cisapride.¹ The serious nature of this drug interaction involving the cytochrome-P450 system played a big part in the removal of cisapride from the market. This example underscores the importance of understanding the cytochrome-P450 system and its role in drug interactions.

Much new information has been discovered about the cytochrome P-450 system over the past few years. The cytochrome P-450 is a group of isoenzymes found in the highest concentration in hepatocytes and the small intestines but also to a lesser extent in the kidneys, lungs and brain.² The nomenclature for the cytochrome P-450 (CYP-450) was first suggested in 1987. In this naming system an isoenzyme is given a family name which is represented by an Arabic number. This is followed by a subfamily classification which is denoted by an uppercase letter. This is then followed by the individual gene which is classified by another Arabic number (e.g. CYP2D6).³ More than 30 human CYP-450 isoenzymes have been identified. Fortunately, only a few are responsible for the majority of drug metabolism making it somewhat easier for the practitioner to evaluate the potential for interactions when prescribing combinations of drugs metabolized by the CYP-450.^{2,4}

Even though there are only a few isoenzymes that are currently known to be responsible for drug metabolism, evaluating these drug interactions can still be quite complex. The following are a few general guidelines to keep in mind.³ First, a drug may act as an inhibitor or inducer of a certain isoenzyme even though it is not a substrate for that enzyme. For example, quinidine is a potent inhibitor of CYP2D6 but it is metabolized by CYP3A4. Therefore, quinidine may interact with drugs such as desipramine and codeine

which are metabolized by CYP2D6 even though quinidine itself is not metabolized by this isoenzyme. Second, drugs may be metabolized by more than one isoenzyme. A good example of this is warfarin. The more pharmacologically active isomer of warfarin (S-warfarin) is metabolized by CYP2C9 while the less potent R-warfarin is metabolized through CYP3A4 and CYP1A2.⁴ This means that an inhibitor or inducer of CYP2C9 will generally have a greater effect on the INR of a patient taking warfarin than those drugs affecting CYP3A4 and CYP1A2. The last general point to keep in mind is that there may be genetic polymorphism for some of the isoenzymes.⁵ This means that there may be variability among individuals as to the metabolic capacity of a certain isoenzyme. This has been shown to occur with CYP2D6. Two populations of people have been found: poor metabolizers and normal metabolizers. A poor metabolizer would be at increased risk of adverse effects from a drug metabolized by CYP2D6 such as trazodone especially if a CYP2D6 inhibitor such as fluoxetine is also given. This individual may need a lower dose of the drug metabolized by CYP2D6 (trazodone, in this example). There is currently no easy way to determine which patients are poor metabolizers but this should be kept in mind as a potential cause if a patient has an unusual reaction to a drug known to be metabolized through CYP2D6.

Several lists of the isoenzymes including their substrates, inducers and inhibitors have been published. To see a complete list (and also a more thorough review of the CYP-450 system) the reader should refer to references 2 and 4. It would be difficult to memorize all of these lists but there are a few drugs that should stand out as inhibitors and inducers. Commonly used drugs that are inhibitors of one or more of the CYP isoenzymes include amiodarone, cimetidine, clarithromycin, erythromycin, fluvoxamine, fluoxetine, haloperidol, isoniazid, metronidazole, nefazodone, paroxetine, quinidine, sertraline, zafirlukast, the azole antifungals (fluconazole, itraconazole, ketoconazole) and the protease inhibitors - nelfinavir, ritonavir and saquinavir. The more common inducers include carbamazepine, phenobarbital, phenytoin, rifabutin and rifampin.⁴ Remembering this relatively short list of drugs should help the prescriber recognize the potential

for significant drug interactions. If one of these drugs is started or discontinued, the provider should look closely to evaluate the potential for significant drug interactions.

In the future more isoenzymes of the cytochrome P-450 system may be discovered. This will make the health care providers job both easier and more difficult when it comes to evaluating drug interactions. It will be easier because there will be available more specific information regarding the metabolism of the drugs that are frequently prescribed. On the other hand it will be more difficult because of the volume of information available. Providers should keep current with the drug interaction literature and remember to consult a pharmacist if they have questions regarding drug interactions.

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March 2000

Samir Abu-Ghazaleh, MD*	Sioux Falls	Sandra Smith, MD*	Sioux Falls
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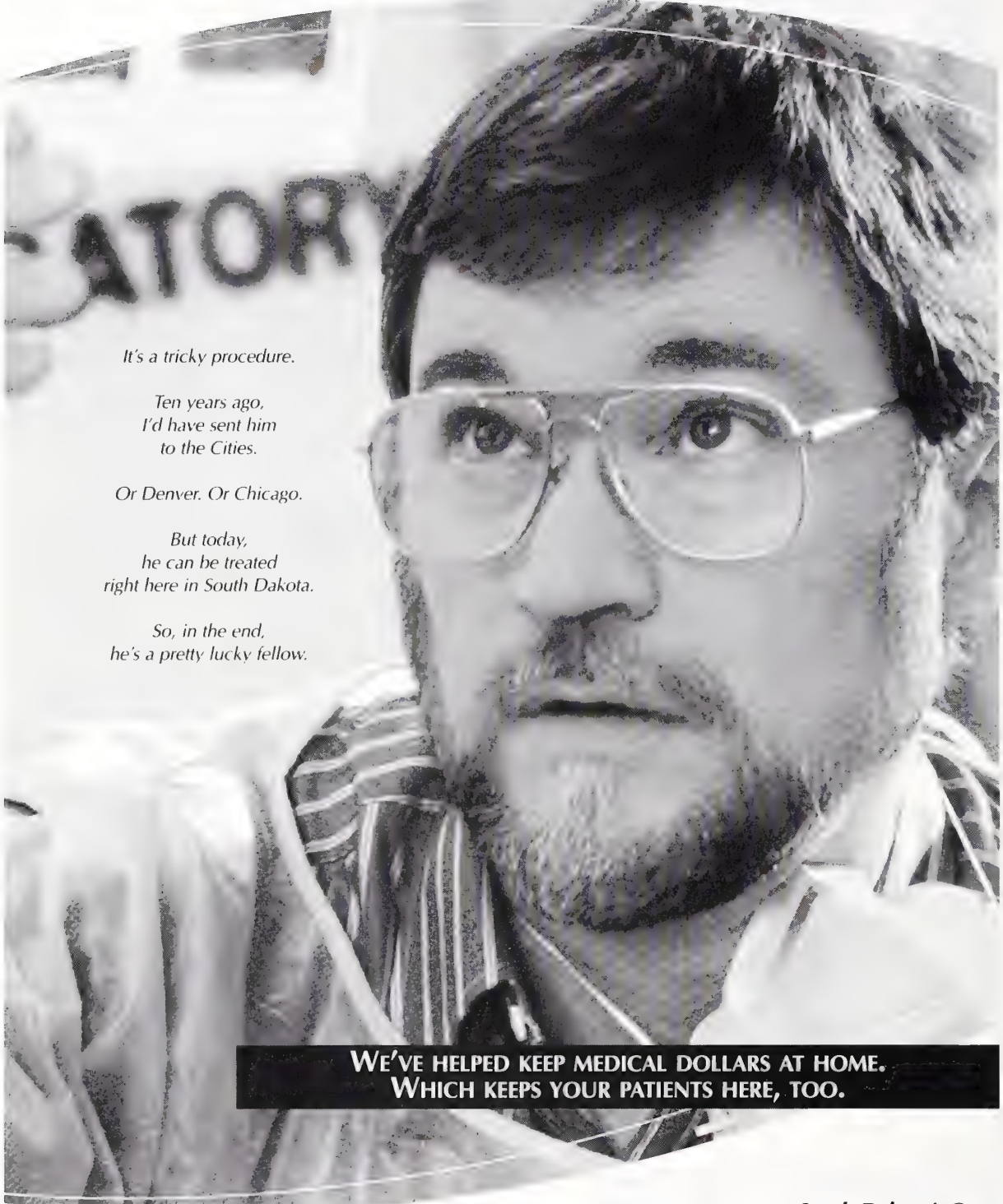
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Lifestyle Satisfaction Of Rural, South Dakota, Family Practice Physicians

Amy L. Boles, MSI; Gerald J. Yutzenka, PhD; Douglas A. Peterson, PhD; and Lisa Kilawee, MPA

ABSTRACT

South Dakota (SD) rural, family practice physicians were surveyed relative to their lifestyle satisfaction. Sixty-eight of 192 surveys were returned (45%), with 75% men and 22% women responding (3% no response). Forty-nine percent of respondents had attended the University of South Dakota School of medicine.

Besides overall satisfaction, factor analysis grouped survey questions into four clusters: a) activities; b) community; c) income; and, d) time. As compared to other physicians, those physicians who were born in SD or had graduated from a SD high school, or had received their undergraduate education in either SD or a bordering state, reported significantly greater overall satisfaction as well as significantly greater satisfaction with both the community and availability of leisure activities. Interestingly, there was no significant difference in lifestyle satisfaction among physicians who attended medical school in either SD or a bordering state, as compared to physicians who attended medical school elsewhere. It does appear that the degree of “connectedness” to SD positively impacts the lifestyle satisfaction of SD, rural, family practice physicians.

INTRODUCTION

It is commonly held that rural areas in the United States continue to be medically under-served even as there is a perceived oversupply of physicians.¹⁻³ This maldistribution of physicians has led to attempts to recruit and retain more primary care physicians in rural areas.

Studies have identified several factors that may play a role in the recruitment and retention of primary care physicians into rural sites.^{1,3-6} These factors take into account the spouse's input⁷ as well as the perceived quality of the medical community and the physician's perception of the community as a whole.⁴ A recent study indicated that the degree to which the physician and the family became integrated into the community (both the medical community and the community at large) played a significant role in helping to retain the physician within that community.³ Other studies have found that the spouse's acceptance of the area,⁶ satisfaction of spouse's need,⁸ quality of children's school,⁶ and the ability of the family to connect with others in the community,³ were important factors in the physician's decision to remain in the community.

Previous research has demonstrated that physicians who were born and reared in a rural area have a greater tendency to establish rural medical practices.^{4,5} In addition, physicians living in a rural area were more likely to have been raised in smaller communities⁵ and to have graduated from rural high schools.⁹ In a previous survey of South Dakota physicians, it was noted that physicians indicated a preference to return either to their hometown or to a location in close proximity of their hometown.⁵ This study also noted that a variety of factors influenced where South Dakota physicians practiced.⁵ These included: spouse reared in a rural area, closeness to spouse's hometown, size of spouse's high school graduating class and likelihood that the physician's residency site was in a smaller city. The fact that the residency training site was located in either South Dakota, Nebraska, or Minnesota also played a role in a physician's return to South Dakota to practice.⁴ As compared to non-South Dakota physicians, South Dakota physicians tended to have greater satisfaction with community and practice and their spouses tended to be more satisfied with the community.⁴

South Dakota physicians tended to rate “high medical need for the area” and “high quality children’s school(s)” as important attributes of the practice community, while non-South Dakota physicians tended to rate “cultural opportunities of the area,” “Opportunities for physician’s and spouse’s professional growth,” and “being close to a large community,” as more important.⁵ “Outdoor recreation opportunities of the area,” and the “cultural opportunities of the area” were factors that were ranked highly by both South Dakota and non-South Dakota physician graduates of USDSM.⁴ A perception of a lack of cultural opportunities of the area was cited by physicians as an important reason for not establishing a practice in South Dakota,⁵ as well as played a role in the decision to practice in towns with a population greater than 5,000.⁴

A quality lifestyle is important to physicians.⁸ Satisfaction with the community in general is often cited as being of importance in whether a physician will establish a practice, and ultimately remain at that practice site. This lifestyle satisfaction extends to the availability of social, cultural, civic and leisure activities, and includes the satisfaction of the spouse and family.³ A greater ability of the physician to integrate into the community translates into greater perceived satisfaction and increased likelihood of remaining in the practice site and the degree of “connectedness” of the physician with a community is often a key factor as to whether the physician will remain.³

The purpose of this study was to determine the degree of lifestyle satisfaction of rural South Dakota family practice physicians, as well as determine factors which may correlate to increased satisfaction. It was also desired to determine if “connectedness” to South Dakota was important in assessing physician lifestyle satisfaction.

METHODS

In September 1998, self-administered surveys were mailed to all licensed family practice physicians in rural South Dakota, with follow-up postcards mailed five weeks after the initial survey. All responses to the survey were kept strictly anonymous. A list of South Dakota, family practice physicians, was obtained from the South Dakota State Board of Medical and Osteopathic Examiners and was used to identify a cohort of rural, family practice physicians. For the purpose of this study the term “rural” was used as defined by the Federal Office of Rural Health Policy. Rural included any area outside of a metropolitan statistical area (MSA)¹⁰ and thus excluded Lincoln, Minnehaha and Pennington counties.

Besides providing demographic data, physicians used a seven point Likert scale to respond to 16 questions regarding satisfaction with their lifestyle,

Demographic Data of Responding Rural Family Practice Physicians		
Variable	Men	Women
Gender	75%	22%
Mean Age	46	38
Income		
<\$80,000	2	1
\$80,000-\$125,000	9	4
\$125,000-\$150,000	15	2
\$150,000+	25	9
Mean Income:	\$125,000-\$150,000	\$125,000-\$150,000
Community Size		
0-1,000	7	4
1,001-2,000	16	2
2,001-5,000	7	3
5,001-10,000	8	2
>10,000	15	5
Number of Children		
Zero	0	2
One	1	1
Two	13	6
Three	23	5
Four	9	1
Five	3	0
Six	2	0

Table 1
15 questions regarding the physician’s perception of their spouse’s satisfaction, and 8 questions regarding the physician’s perception of their children’s satisfaction. Data obtained from the survey responses was analyzed using the Statistical Product and Service Solutions (SPSS) statistical package for Windows.¹¹ Demographic information (gender, income, etc.) is reported as mean data. In addition to analyzing the physician’s overall satisfaction, factor analysis was used to group the 16 physician-directed satisfaction questions into four subsets: a) activities; b) community; c) income; and d) time. Factor analysis of the respondent’s perceptions of their spouse’s and children’s satisfaction failed to yield any meaningful sub-scales and thus was treated as the physician’s perception of the spouse’s or children’s overall satisfaction. A one-way ANOVA was used to analyze differences in the degree of satisfaction on a number of factors, including income, community, activities, and time.

RESULTS

Sixty-eight of 194 surveys were returned for a response rate of 35%. Table 1 provides gender breakdown and other demographic data of respondents. Seventy-five percent of respondents were men, 22% were women, and gender was not indicated for 3% of the respondents. The average age for men was 46 years of age, and the average age for women was 38 years of age. The average income for both genders fell into the range of \$125,000-\$150,000. Ninety-seven percent of total respondents reported having children. In addition,

Distribution of Place of Birth, High School Graduation, Undergraduate Education and Medical Education of Responding Rural South Dakota Family Practice Physicians			
Variables	South Dakota	Bordering State	Other State
Place of Birth	49.3%	20.9%	29.9%
High School Graduation	80.6%	15.2%	24.2%
Undergraduate Education	56.1%	21.2%	22.7%
Medical Education	49.3%	11.9%	38.8%

Table 2

it was noted that almost one-half (49.3%) of responding physicians were born in South Dakota, nearly two-thirds (60.6%) graduated from a South Dakota high school,

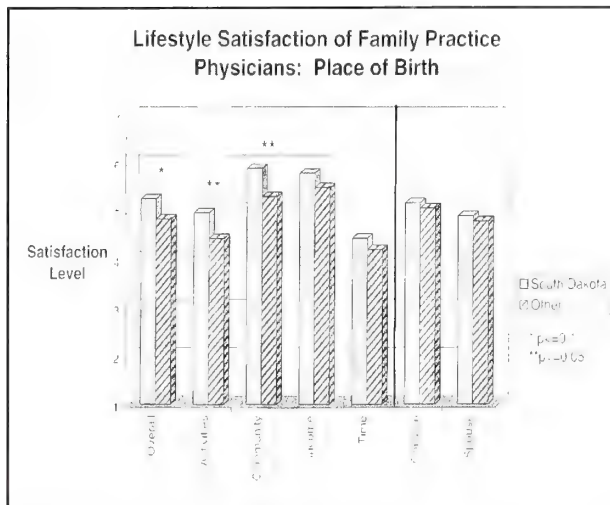


Figure 1

and about one-half (49.3%) attended the University of South Dakota School of Medicine for at least a portion of their medical studies.^a (Table 2)

Physicians born in South Dakota reported greater satisfaction, overall, [$F(1,65)=3.510$, $p=.066$] than did physicians born in other states, (Figure 1). In addition, South Dakota born physicians reported greater satisfaction with the community in which they currently reside [$F(1,65)=4.398$, $p=.040$], and with availability of leisure activities [$F(1,65)=3.259$, $p=.076$] (Figure 1).

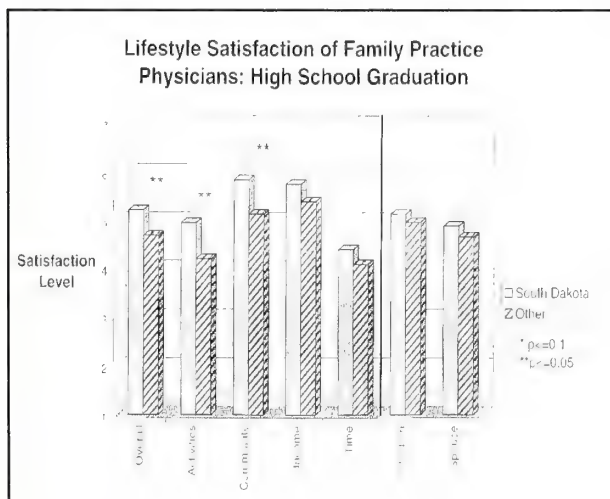


Figure 2

^a From 1907-1974, USDSM was a two-year medical school. From 1974-1987, USDSM was a four-year school with 15 students from each class transferring to another medical school to complete their training and the remaining students completing their studies at USDSM. Beginning with the graduating class of 1988, all entering students expect to complete their medical education in South Dakota.

Likewise, physicians who were graduates of a South Dakota high school reported significantly higher overall satisfaction [$F(1,64)=5.787$, $p=.019$], as well as a significantly higher degree of satisfaction with their community [$F(1,64)=6.531$, $p=.013$] (Figure 2), as compared to physicians who were not graduates of a South Dakota high school.

Physicians obtaining their undergraduate education in either South Dakota or a bordering state, as compared to those who attended colleges in other states, showed higher overall satisfaction [$F(1,64)=7.860$, $p=.007$], as well as higher satisfaction with community [$F(1,64)=6.654$, $p=.012$], and leisure activities [$F(1,64)=8.126$, $p=.006$] (Figure 3). In addition, these physicians also indicated that they perceived their spouse's overall satisfaction to be higher [$F(1,52)=8.459$, $p=.005$] as compared to the perception of physicians educated elsewhere, (Figure 3). In general, physicians tended to rate their spouse's

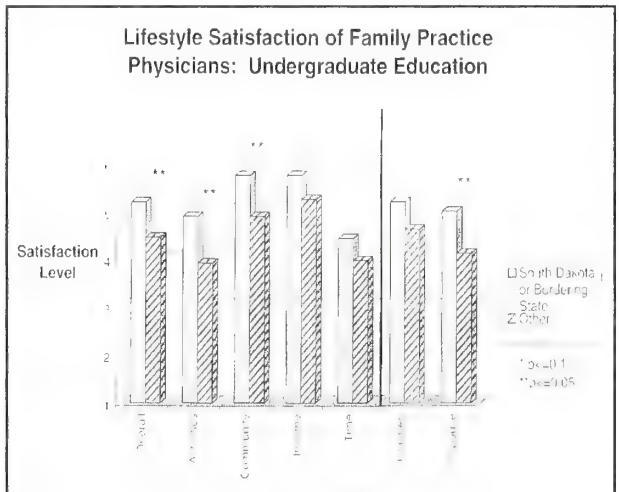


Figure 3

satisfaction at approximately the same level as their own [$r=.722$, $p<.01$]. Interestingly, there were no significant differences in any satisfaction factor between physicians who attended either the University of South Dakota School of Medicine or a medical school in a bordering state, as compared to those who attended medical school outside the region.

The physician's community of residence was allocated to one of six categories based on population, (0-1,000; 1,001-2,000; 2,001-5,000; 5,001-10,000; 10,001-30,000; and > 30,000), there was an approximately equal number of respondents in each category. It was noted that physicians' overall satisfaction tended to increase with increasing community size, [$F(5,62)=2.654$, $p=.031$] (Figure 4). This tendency for increasing satisfaction with increasing community size was also noted for physician's

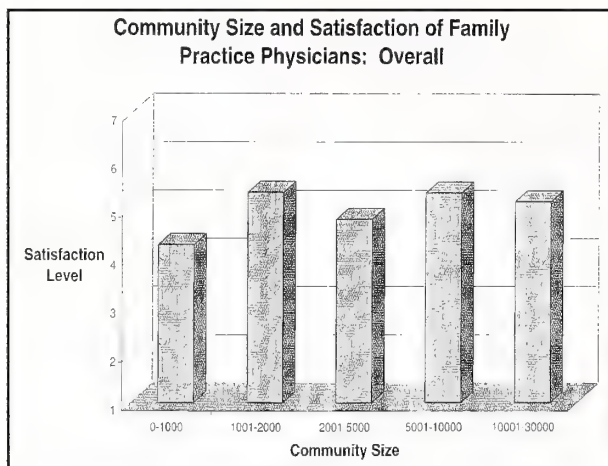


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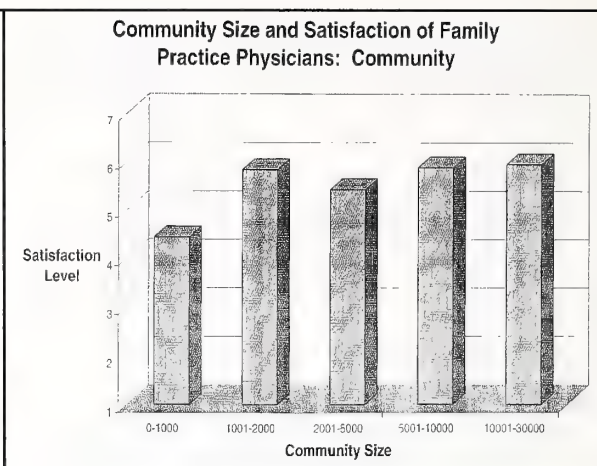


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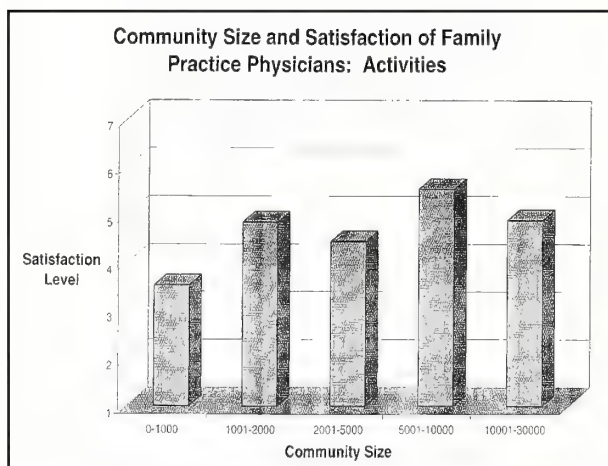


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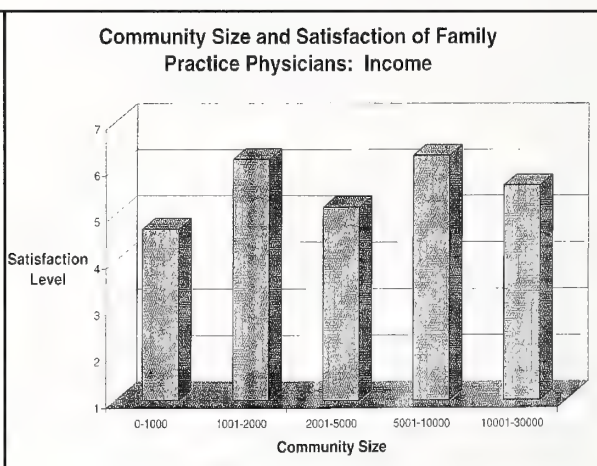


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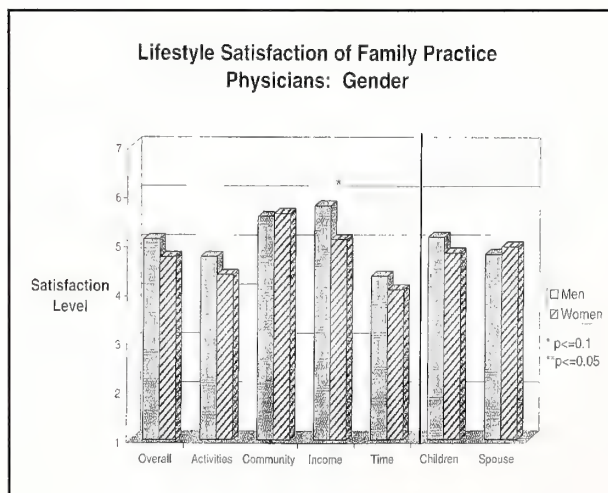


Figure 8

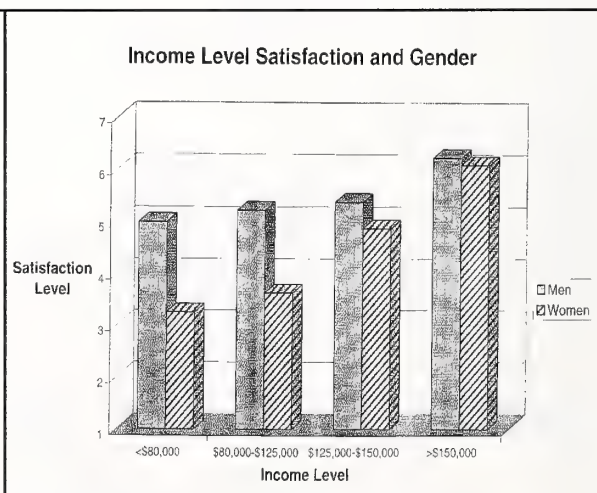


Figure 9

Mean Physician Satisfaction with Community as a function of Graduation from a South Dakota High School		
Community Size	South Dakota	Other
0-5000	5.2467	4.3529
>5000	5.1922	5.3153

Table 3

satisfaction with community [$F(5,62)=3.873$, $p=.004$] (Figure 5), activities [$F(5,62)=3.902$, $p=.004$] (Figure 6), and income [$F(5,62)=3.085$, $p=.015$] (Figure 7). Interestingly, for communities with a population of 5,000 or less, there was a significant interaction between physician satisfaction with the current community and their graduation from a South Dakota high school, [$F(1,62)=5.410$, $p=.023$] (Table 3). Although increasing community population did not significantly alter the level of satisfaction noted for physicians who were graduates of a South Dakota high school, (0-5,000; 5.25;>5,000; 5.19), physicians who were not graduates of a South Dakota high school did indicate increased satisfaction with increased size of the community (0-5,000; 4.35;>5,000 5.31) (Table 3).

Finally, analysis of degree of satisfaction with income showed that men reported being somewhat more satisfied with their lifestyle as compared to women [$F(1,65)=3.53$, $p=.065$] (Figure 8). In addition, female physicians' satisfaction decreased with declining income, (Figure 9).

DISCUSSION

Previous studies have demonstrated that there are a variety of factors that influence the decision of physicians to locate and remain in rural communities.^{1,3-7} These factors include such things as the physician's satisfaction with both the available medical community and the community at large. In addition, the degree of satisfaction of the physician's spouse and family play significant roles. The current study was designed to gain insight into the lifestyle satisfaction of rural family practice physicians in South Dakota.

The "connectedness" of physicians to South Dakota appears to play a vital role in the reported satisfaction of the physician. South Dakota born physicians (Figure 1) and those physicians who had graduated from a South Dakota high school (Figure 2), as compared to physicians who were not South Dakota born or who graduated from a high school outside of South Dakota, reported significantly higher overall satisfaction, as well as significantly higher satisfaction with both the availability of leisure activities and the community in which they reside. Similarly, those physicians who had completed their undergraduate education in South Dakota or at a college in a bordering state (Figure 3)

reported significantly higher overall satisfaction, as well as significantly higher satisfaction with leisure activities and the community. In general, South Dakota rural physicians perceived their spouse's lifestyle satisfaction to be high. However, because of the nature of the survey, the spouse's reported satisfaction level may be more of a reflection of the physician's own satisfaction than a true indicator of their spouse's satisfaction. The reported physician's satisfaction is consistent with previous studies which indicated that physicians often cite previous rural exposure as an important factor in their choice of a rural practice.³⁻⁵

Besides the degree of "connectedness," there were other factors that also contributed to physicians' satisfaction. Income played an important role in physicians' satisfaction, and this was especially true for female physicians. (Figure 8) While the reported mean income of female physicians was the same as male physicians, female physicians' satisfaction level decreased significantly as income declined. (Figure 9)

Community size plays a significant role in determining satisfaction of physicians. Physicians located in communities of greater than 1,000 population had a significantly greater degree of overall satisfaction as well as increased satisfaction with activities, community and income. (Figures 4-7) This is consistent with a previous study³ which found that social, cultural, civic and leisure activities were important to physicians and that these activities are often more readily available in larger communities. Interestingly, for communities of 5,000 or less, physicians who were graduates of a South Dakota high school reported the greatest degree of satisfaction. (Table 3) This data supports a previous study that reported that physicians who graduated from a rural high school were more likely to return to rural areas to practice.⁹

CONCLUSIONS

Lifestyle satisfaction of family practice physicians in rural South Dakota was greatest for those physicians who were born in South Dakota, graduated from a South Dakota high school, and who obtained their undergraduate education in South Dakota or a bordering state. This "connectedness" to the state has been shown in previous studies to increase the likelihood of physicians locating and remaining in rural South Dakota.

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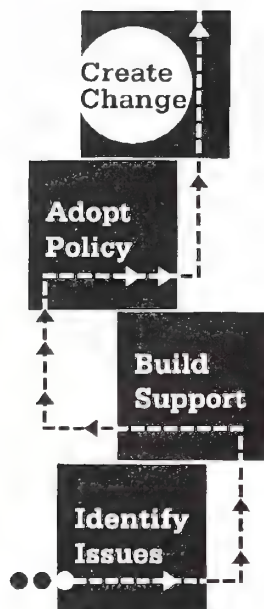
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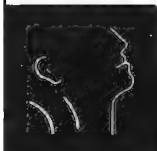
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- Jun 15 **Grand Rounds** - 6:30PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Jun 15 **Neuroscience Grand Rounds** - 8:00AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas 333-3114.
- Jun 15 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Jun 15 **USDSM Audio Conference** - 8:00PM CST/7:00PM MST; Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 16 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Jun 16 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Jun 17 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jun 20 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jun 20 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Jun 20 **USDSM Audio Conference** - 12:00PM CST/11:00AM MST; Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 20 **USDSM Audio Conference** - 10:00PM CST/9:00PM MST; Speaker: Michael E. Thase MD; Topic: Psychotic Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 21 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jun 21 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Jun 21 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Speaker: Barry Eliot Cole MD; Topic: "Toxicities: Manage the Symptoms or Stop the Opioid?"; Michelle Peters - 357-1366.
- Jun 21 **USDSM Audio Teleconference** - 11:00AM CST/10:00AM MST; Speaker: Mark H. Rapaport MD; Topic: Norepinephrine & Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 21 **USDSM Audio Teleconference** - 12:00PM CST/11:00AM MST; Speaker: Anita H. Clayton MD; Topic: Depression on Women; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.

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- Jun 21 **USDSM Audio Conference - 7:00PM CST/6:00PM MST**; Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 22 **Tumor Conference, Avera Cancer Institute - 12:00PM**; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jun 22 **Cardiovascular Conference - 12:00PM**; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Jun 22 **Trauma Grand Rounds - 12:00PM**; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Jun 22 **Pediatric Grand Rounds - 8:00AM**; Sioux Valley Info: Larry Wellman - 333-7178.
- Jun 22 **Cancer Conference - 12:00PM**; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
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- Jun 23 **Tumor Conference - 12:30PM**; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jun 23 **Physicians Continuing Education - 7:30AM**; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Jun 24 **Grand Rounds - 8:00AM**; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jun 26 **Tumor Board - 8:00AM**; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Jun 27 **Tumor Conference - 7:00AM**; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Jun 27 **USDSM Audio Teleconference - 2:00PM CST/1:00PM MST**; Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 27 **USDSM Audio Teleconference - 7:00PM CST/6:00PM MST**; Speaker: J. Craig Nelson MD; Topic: Cases in Treatment of Resistant Depression; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 27 **USDSM Audio Conference - 11:00AM CST/10:00AM MST**; Speaker: Jack M. Gorman MD; Topic: How Norepinephrine is Involved with Panic and Anxiety; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 27 **USDSM Audio Conference - 12:00PM CST/11:00AM MST**; Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 27 **Tumor Conference - 12:00:00 PM**; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

- Jun 28 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jun 28 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Speaker: M. Thomas Stillman MD; Topic: "NSAIDs and the Aging Kidney"; Info: Michelle Peters - 357-1366.
- Jun 28 **USDSM Audio Conference** - 9:00PM CST/8:00PM MST; Speaker: Robert M.A. Hirschfeld MD; Topic: Antidepressant Side Effect Management; for more information on this series contact Lynn Thomason at the office of CME, 357-1480.
- Jun 29 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jun 29 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Jun 30 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.

JULY 2000

- Jul 1 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jul 4 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jul 5 **CPCWednesday Noon Conference** - 12:00PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Jul 5 **Internal Medicine Grand Rounds** - 7:30AM; McKennan Hospital Auditorium; Speaker to be announced; Topic: to be announced, Info: Michelle Peters - 357-1366.
- Jul 5 **Internal Medicine, Tumor Conference** - 8:00AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Jul 6 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jul 6 **Grand Rounds** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Jul 6 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Jul 7 **Morbidity/Mortality Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jul 7 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Jul 8 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jul 10 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Jul 10 **Clinical Pathology Conference** - 8:00AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Jul 11 **CPR Certification/Recertification** - 7:00PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jul 11 **Geriatric Forum** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Jul 11 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jul 11 **Breast Cancer Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital BHI - 333-5244.
- Jul 12 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

- Jul 12 **Internal Medicine Grand Rounds** - 7:30AM; McKennan Hospital Auditorium; Speaker: Bruce G. Baranski MD; Topic: Treatment of Existing DVT with Low Molecular Weight Heparins; Info: Michelle Peters - 357-1366.
- Jul 12 **Geriatric Grand Rounds** - 12:00PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN 333-1000.
- Jul 13 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jul 13 **Pediatric Grand Rounds** - 8:00AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.
- Jul 13 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Jul 14 **Pathology Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jul 15 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jul 18 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jul 18 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Jul 19 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jul 19 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Jul 19 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Speaker: John H. Bond MD; Topic: Atypical Presentations of GERD; Info: Michelle Peters - 357-1366.
- Jul 19 **USDSM Audio Conference** - 12:30PM CST/11:30AM MST; Speaker: Mark R. Green MD; Topic: Topoisomerase/Inhibition - Pancreatic Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Jul 20 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jul 20 **Grand Rounds** - 6:30PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Jul 20 **Neuroscience Grand Rounds** - 8:00AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas 333-3114.
- Jul 20 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Jul 21 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Jul 22 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jul 24 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Jul 25 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jul 25 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Jul 26 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jul 26 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Jul 27 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

- Jul 27 **Cardiovascular Conference** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Jul 27 **Trauma Grand Rounds** - 12:00PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Jul 27 **Pediatric Grand Rounds** - 8:00AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Jul 27 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Jul 27 **USDSM Audio Conference** - 11:30AM CST/10:30AM MST; Speaker: Mark R. Green MD; Topic: Topoisomerase I Inhibition - Pancreatic Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Jul 28 **Tumor Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jul 29 **Grand Rounds** - 8:00AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

MISCELLANEOUS

JUNE 2000

- Jun 14-16 **Annual Advances in Clinical Pediatrics**, Rushmore Plaza Holiday Inn, Rapid City, SD. Fee: \$350. 13 hrs AMA Category 1 credit. Contact: Dr. Larry Wellman, SD Children's Specialty Clinics, 1100 S Euclid Ave, Sioux Falls, SD 57105-0411. Phone: 605/333-7178. Fax: 605/333-1585.
- Jun 22-24 **Strategies for Success IX: The Practice Management Conference for Cardiovascular Specialists**, Southampton, Bermuda. AMA Category 1 credit avail. Am College of Cardiology, Extramural Programs, 9111 Old Georgetown Rd, Bethesda, MD 20897-1448. Phone: 800/253-4636, ext 695. Fax: 301/897-9745. Internet: www.acc.org.
- Jun 23-25 **Frontiers in Endourology: 2000 Laparoscopic Urologic Oncology**, EPN Ed Ctr, Washington Univ Med Ctr, St. Louis, MO. Fee: \$2,400. 25.5 hrs AMA Category 1 credit. Washington Univ, CME-WUSM, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110. Phone: 314/362-6891. Fax: 314/362-1087. Email: cme@msnotes.wustle.edu. Internet: www.wustl.edu.

JULY 2000

- Jul 9-13 **World Alzheimer Congress 2000: Pivotal Research**, Washington Hilton & Towers, Washington, DC. Fee: \$650. 15.5 hrs AMA Category 1 credit. Alzheimer's Disease and Related Disorders Association, Inc, 919 N Michigan Ave, Ste 1100, Chicago, IL 60611-1676. Phone: 312/335-8700. Fax: 312/335-1110. Email: alzheimers2000@alz.org. Internet: www.alz.org.
- Jul 13-14 **World Alzheimer Congress 2000: Bridging Research and Care**, Washington Hilton & Towers, Washington, DC. Fee: \$300. 11.75 hrs AMA Category 1 credit. Alzheimer's Disease and Related Disorders Association, Inc, 919 N Michigan Ave, Ste 1100, Chicago, IL 60611-1676. Phone: 312/335-8700. Fax: 312/335-1110. Email: alzheimers2000@alz.org. Internet: www.alz.org.
- Jul 15-18 **World Alzheimer Congress 2000: Creative Care**, Washington Hilton & Towers, Washington, DC. Fee: \$450. 20 hrs AMA Category 1 credit. Alzheimer's Disease and Related Disorders Association, Inc, 919 N Michigan Ave, Ste 1100, Chicago, IL 60611-1676. Phone: 312/335-8700. Fax: 312/335-1110. Email: alzheimers2000@alz.org. Internet: www.alz.org.
- Jul 16 **Mayo Clinic Internal Medicine Certification & Recertification Board Review - 2000**, Mayo Foundation, Rochester, MN. Fee: \$950. 56 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.

If you have a continuing education event coming up, contact the SOUTH DAKOTA JOURNAL OF MEDICINE and have it published in the CME Conference section of the JOURNAL!

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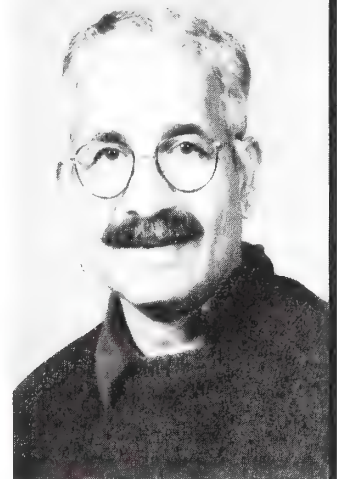
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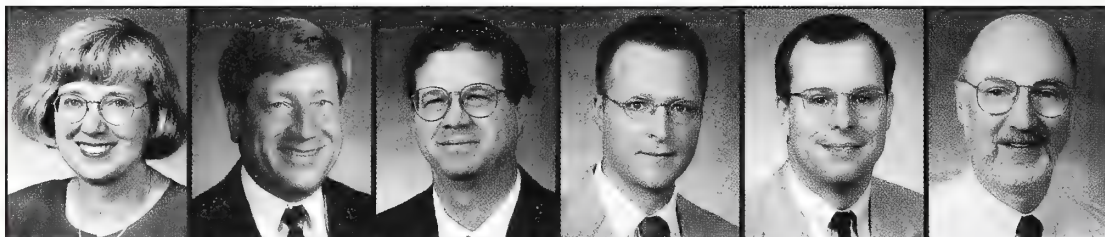
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About the Cover

This Bull Elk photo was taken in the Rocky Mountains by professional photographer and physician John W. Herbst. Dr. Herbst owns Grizzly Bear Nature Photos in Keystone, SD.

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

The New AMA

The American Medical Association has proved that the aphorism "you learn more from failure than success" is true.

In 1960, 65.7% of American physicians were members of the organization. In the ensuing 40 years the AMA lost prestige and membership until now, only 31.1% of physicians are members. Some of the pain was self-inflicted. A relatively closed leadership had lost touch with members who were beset on all sides by dwindling fees and declining respect. Some of the pain was caused by changes in society. Physicians who came of age after the sixties often held their generation's suspicious view of the establishment. More doctors became employees of health care organizations and clinics and thought that the AMA was not important to them.

Well, this sluggish bear of an organization has been stung often enough that it has become an irritable grizzly. The AMA has become an aggressive force for physicians in a number of areas.

In politics:

"House Call" is a campaign that was launched in November 1999 in which officials follow the presidential candidates in a motor home in order to keep the pressure on them regarding medical issues. The AMA leaders are usually interviewed by the (friendly!) local radio and television stations and make their points about the Patients' Bill of Rights, the definition of medical necessity, HMO accountability, and tax incentives for family based health insurance.

In Congress:

The AMA has had great success with the Patients' Bill of Rights Legislation and is pushing hard for the Campbell Bill, which would allow non-associated physicians to negotiate as a group with insurers.

In the states:

The AMA has an Advocacy Resource Center that supports state societies in legislative matters. The center writes model legislation for use by state societies. The AMA helped write Texas Senate Bill 7468, which allows Texas physicians to negotiate with insurers as a group rather than individually.

In the courts:

The AMA has supported physician actions in Connecticut (the method by which insurers calculate usual and customary fees), in Georgia (prompt payment of claims) and in Tennessee (scope of practice issues).

At headquarters:

The AMA announced a \$20 million scale back in personnel and superfluous programs in order to concentrate on the issues that matter most to physicians.

Much of the credit for the AMA's renaissance goes to Dr. E. Ratcliffe Anderson, the executive vice president. His style could be called "Janklowesque" which will probably explain the plaudits, and the criticisms, which come his way. He has the best interest of physicians, and, more importantly, the best interest of patients as his focus.

The new AMA is the kind of organization that fulfills physicians' wishes. It is respected. It is assertive. It is getting results. Physicians should join the AMA.

Alliance News



**Karen Waltman, President
South Dakota State Medical Association Alliance**

"I pledge my loyalty and devotion to the American Medical Association Alliance and to the South Dakota State Medical Association Alliance. I will support their activities, protect their reputations, and ever sustain their high ideals."

This Alliance Pledge opened the 91st SDSMA Alliance Post Convention Board of Director's meeting which was held in Rapid City in June. Board members from across the state joined together and committed to organizational goals for the coming year. "Making The Connection In The New Millennium" was the umbrella theme presented as the Alliance Challenge 2000 marketing concept was introduced. We are 90 years old and stronger than ever, however, it is time to further challenge ourselves to continue the tremendous progress made and build the visibility of the organization.

The Alliance Challenge 2000 involves commitment to our organization at the local, state and national levels; communicating effectively; caring for ourselves, spouses, families, and each other; sharing our progress and growth; and providing continuity from our past to the future. The involvement and participation of board members and the Alliance Challenge 2000 Development Team will enable us to bring the organization to its next stage of development. A team of experienced Alliance leaders, including Robbie Ahrlin, Mary Bartsch, Cathie Calhoon, Patti Herlihy, Terry Hermann, Karen Koob; Mollie O. Krafka, Ruth Parry, Ronda Stensland, and Donna Van Dis will visit each district. Their focus will

be to help districts to identify their current strengths and challenges, develop an action plan which addresses district issues, assign appropriate Development Team members to mentor specific districts, report district mid-year and end of year development progress status, and make future recommendations for their designated district. Board members enthusiastically embraced the program and will provide the guidance and direction as needed.

It is truly my privilege to lead the Alliance Challenge 2000, and I look forward to the development process we are about to begin. Future issues of this publication will highlight specific strategies and achievements along the way.

Immediately following our state convention, the 2000 Annual Session of the House of Delegates of the American Medical Association Alliance met in Chicago. It was my honor to be a part of the delegation from South Dakota, which also included Immediate Past President, Ronda Stensland and President Elect, Donna Van Dis. As members of the AMA Alliance House of Delegates, we represented SDSMA Alliance members as decisions on important issues affecting the organization and its programs were addressed.

We were especially proud to have Patti Herlihy installed as the AMA Alliance Secretary, and Robbie Ahrlin was elected to the Nomination Committee. Robbie also serves on the AMA Alliance Health Promotion Committee and both she and Patti served as AMA Alliance delegates. Our sincere congratulations to these national leaders from South Dakota.

As the wonderful memories from our state convention and the House of Delegates 2000 Annual Session are shared with members of our medical family, remember all of the individuals who helped to make these meetings and events so informative, productive and fun, i.e., Colleen Adam, the Immediate Past President of the AMA Alliance, and her inspirational speech at the installation of the 2000-2001 elected officers for the SDSMA Alliance, and Tom and Mollie O. Krafka and T.R.A.S.H., for the tremendous job they did in planning and executing the "Gold Rush" AMA Foundation fundraising event. Everyone who supported the event through his or her contributions and attendance is to be applauded.

We have so much to be thankful for as the experiences shared helped us to start this 91st year with the energy of many voices, united to make our communities healthier. Our historical records will reflect this time together as we move forward to "Make The Connection" in the 21st Century.

Ronda Stensland, SDSMA Alliance President for 1999-2000, acknowledged the organization's 90 years "as the oldest continuous Medical Association Alliance in the United States" during her final report at the state convention. Several letters from elected officials were received and shared with the Alliance members present. Ronda traveled to Washington, DC, this spring in an effort to bring the message of the Alliance and its members to the Capitol. She was especially proud to receive the following document which is now on permanent record in the Library of Congress.



United States
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Congressional Record

PROCEEDINGS AND DEBATES OF THE *106th* CONGRESS, SECOND SESSION

Vol. 146

WASHINGTON, MONDAY, MAY 8, 2000

No. 55

Senate

A TRIBUTE TO THE SOUTH DAKOTA STATE MEDICAL ASSOCIATION ALLIANCE

Mr. JOHNSON. Mr. President, I rise today to recognize the South Dakota State Medical Association (SDSMA) Alliance. This year the SDSMA Alliance will celebrate its 90th anniversary, making it the oldest continuous medical Alliance in the United States. For ninety years, this physicians' spouses organization has proudly been the volunteer hands and voices of the South Dakota State Medical Association.

Though their accomplishments may not be always easily enumerated or quantified, their impact has been felt across every mile of the state of South Dakota. The SDSMA Alliance has led or united with other organizations in an effort to insure that our communities are healthier and safer. Members of the SDSMA Alliance have always reached out to feed the hungry, give warmth to those who were cold, provide shelter and safety to the abused, and bring smiles and joy to children in need of books or toys. Health promotion and community projects are, indeed, the cornerstone of the Alliance.

Oftentimes, the mission statement of an organization tells us all we need to know about the character of the individuals who have joined together. In the case of the SDSMA Alliance, this statement holds true once again. Their mission to promote public health, create safer communities, protect the patient physician relationship, and generate funds to help educate future physicians is a testament to their desire to positively impact every South Dakota community in which their work is done.

As just one example of the Alliance's hard work and dedication, last June they declared-not-war-but peace on all school campuses throughout our state. Their focus was not just on guns and grenades, but bullying and fist fights, taunting and threats, intolerance and isolation, because that, as we all know, is where the problems usually begin.

To emphasize the need to provide our children and educators with a safe school environment, the SDSMA Alliance launched a campaign to provide K-3rd grade students with conflict resolution and self-esteem building activities. Thousands of 'I Can Choose,' 'I Can Be Safe,' 'Hands Are Not For Hitting,' and 'Be A Winner' workbooks were distributed to schools and shelters throughout our state. Their goal was to arm children with self-esteem and to teach them how to make healthier and safer choices. It is efforts such as these that weave the fabric of our communities closer together and promote safe learning environments for South Dakota's children.

Mr. President, it is with great honor that I rise today to recognize the South Dakota State Medical Association Alliance for ninety years of hard work and dedication to the health and safety of the people of South Dakota. I applaud the SDSMA Alliance's efforts to combat those forces in our society which would jeopardize the mental and physical wellness of any citizen. I sincerely thank the Alliance for their positive contributions to South Dakota's communities, and I hope that one day we can stand together and say, 'Mission Accomplished.'



Updated Recommendations On An Established Test - ANA

The use of serologic tests for antinuclear antibodies (ANA) and antibodies to specific nuclear antigens is important in the diagnosis of systemic rheumatic disease. The results must always be related to the clinical assessment of the particular patient as positive results can be seen in various rheumatic conditions and in healthy normal individuals.

We will start by discussing the screening ANA test for confirmation of the diagnosis of systemic lupus erythematosus (SLE). The sensitivity of ANA for this use has improved remarkably with the use of human cell lines of Hep-2 as the substrate. A positive test is a titer of 1:40 or higher. With the use of the above substrate a case of "ANA negative lupus" is very uncommon. However, with the increased sensitivity, there is always a decreased specificity so that many patients with a variety of rheumatic diseases and normal healthy patients may have a positive ANA test. Further confirming tests more specific for SLE may be indicated (case below).

Specific patterns such as homogenous, peripheral rim, and speckled patterns have less importance than in the initial diagnosis of SLE but can be useful. The traditional method for performing ANA has been immunofluorescence but enzyme immunoassay (EIA) is now being evaluated as a less labor intensive method. The ANA test is performed on serum, which may be kept at refrigerator temperature for three days and frozen at -20°C if the serum is to be stored for longer periods or indefinitely. Freezing and thawing should be avoided. Appropriate positive and negative controls must be used on each run and reagent and personnel federal requirements must be followed.

The ANA test for confirmation of SLE should only be performed if there is a reasonable clinical suspicion for SLE and should not be used for random screening since positive tests occur in normal individuals or in patients with other rheumatic diseases as mentioned above. In fact, the use of the test without the use of the classic American College of Rheumatology criteria for SLE (below) is unreliable.

CRITERIA FOR SLE

1. Malar rash: fixed malar erythema, flat or raised.
2. Discoid rash: erythematous raised patches with keratotic scaling and follicular plugging; possible atrophic scarring.
3. Photosensitivity: rash as an unusual reaction to sunlight.
4. Oral ulcers: oral or nasal ulcers, usually painless.
5. Arthritis: inflammatory arthritis of two or more peripheral joints.
6. Serositis: documented pleuritis or pericarditis.
7. Renal disease: persistent proteinuria (>0.5 g/d or $>3+$) or cellular casts.
8. Neurologic disorder: unexplained seizures or psychosis.
9. Hematologic disorder: hemolytic anemia; or leukopenia white blood count ($<4.0 \times 10^9/L$) or lymphopenia ($>1.5 \times 10^9/L$) on two occasions.
10. Immunologic disorder: anti ds DNA antibodies; anti-SM antibodies; or Antiphospholipid antibodies.
11. Antinuclear antibody: positive antinuclear antibody result.

Other signs and symptoms suggestive of systemic lupus erythematosus include, Raynauds phenomenon, excessive hair loss, unexplained fever, unexplained lymphadenopathy or splenomegaly, and unexplained thromboembolic phenomena.

The ANA test is positive in 95% to 100% (frequency) in SLE. It may also be helpful in increasing or decreasing the likelihood of the diagnosis in scleroderma (60%-80%), Sjogren's syndrome (40%-70%) and idiopathic inflammatory myositis (dermatomyositis or polymyositis) (30%-80%). In these conditions a negative test is not as effective in eliminating them as a cause of the symptoms as in SLE.

In certain conditions such as drug induced SLE, autoimmune hepatic disease or mixed connective tissue disease (MCTD) the test is always positive (100%) since a positive test is a diagnostic criterion of the entity.

In juvenile chronic oligoarticular arthritis (20%-50%) a positive test may predict the presence of uveitis. In Raynaud's phenomenon (20%-60%) a positive makes it more likely that there is a concomitant rheumatic disease such as SLE, rheumatoid arthritis or scleroderma

while a negative ANA is seen in patients with less likelihood of those conditions.

Unfortunately, the ANA may be positive in many disease entities in which it is not useful in diagnosis: rheumatoid arthritis (30%-50%), multiple sclerosis (25%), idiopathic thrombocytopenic purpura (10%-30%), thyroid disease (30%-50%), discoid lupus (5%-25%), infectious disease (varies), malignancies (varies), patients with silicone breast implants (15%-25%), fibromyalgia (15%-25%), relatives of patients with autoimmune diseases such as SLE or scleroderma (5%-25%). Lastly, normal persons may have positive ANA at high titers fairly commonly $\geq 1:40$ (20%-30%), $\geq 1:80$ (10%-12%), $\geq 1:160$ (5%), and $\geq 1:320$ (3%).

The ANA test usually does not have to be repeated if negative unless the clinical condition changes. Nor are more specific autoantibody tests necessary if ANA tests are negative.

If the ANA test is positive, the diagnosis of SLE can be further confirmed along with clinical evaluation by performing tests for anti ds DNA (double stranded DNA) and anti SM (Smith). These tests are fairly specific for SLE especially if in high titer. Anti ds DNA in high titer is also associated with the presence of lupus nephritis. Anti ds DNA may also be used to monitor the activity of SLE. In pregnant patients with SLE, an anti RO (SS-A) test may suggest the presence of complete congenital heart block in the newborn.

J.F. Barlow, MD
Editor

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Hepatitis A Vaccination: Should We Routinely Vaccinate Children?

Wendy Jensen Bender, RPh, PharmD; Rapid City, SD

The most recent childhood immunization schedule contains the recommendation to vaccinate children 24 months old to 12 years old against hepatitis A "in selected areas".¹ South Dakota has been named as one of the selected areas, but there is some controversy as to whether or not our state should be in the "high risk" category. There is further controversy regarding the routine vaccination of children against hepatitis A, since children tend not to manifest serious symptoms with this disease.

Historically, hepatitis A vaccine was recommended for people who traveled to endemic areas, had chronic liver disease, received clotting factors, used illegal injectable drugs, and for homosexual males.^{2,3} Recently, the Advisory Committee on Immunization Practices (ACIP) also recommended that routine vaccination for hepatitis A be completed in all states with high rates of hepatitis A. High rates of hepatitis A are defined as ≥ 20 cases per 100,000 population. This recommendation also states that areas with intermediate rates of hepatitis A should consider routine childhood hepatitis A vaccination. Intermediate rates of hepatitis A are defined as ≥ 10 -<20 cases per 100,000 population.²

South Dakota was placed in the "high rate" category based on data from 1987-1997.² However, in 1999 South Dakota had only 10 reported cases of hepatitis A or a rate of 1.4 cases per 100,000 population.^{4,5} Since 1993 South Dakota has had only one year with a rate of ≥ 10 cases per 100,000 population. In 1995, the rate of hepatitis A was 14.2 cases per 100,000 population.⁴ Therefore, using most recent data, South Dakota does not fall into the "high rate" category or the "intermediate rate" category. Only time will tell if this lower trend continues, but it is a consideration when deciding whether or not to recommend a routine vaccination.

There is also some controversy regarding vaccination of a patient group who does not become seriously ill from that disease. In children, hepatitis A is generally an acute and self-limiting disease.^{2,6} In fact, many children with hepatitis A infection are asymptomatic; hepatitis A infection is asymptomatic in 70% of children under 6 years old.² Older children

and adults, especially the elderly, are much more likely to have symptoms and more significant morbidity and mortality. So, should we force vaccination on one patient population to protect another patient population?⁶ Shouldn't we vaccinate the patients who are at risk for more severe disease (adults and elderly patients)?⁶ These questions certainly are interesting to ponder. While it is considerably easier to vaccinate young children, should we?

One can just as easily argue that young children should be vaccinated, as the incidence of hepatitis A is highest among infants and school-age children.^{2,6} By decreasing the disease occurrence in the group with the highest incidence, we would decrease transmission and possibly subsequent morbidity and mortality.

The South Dakota Department of Health has estimated that the cost of routine vaccination of children through kindergarten entry would cost \$350,000 a year. Hepatitis A vaccine is provided to children up 18 years of age through the Vaccines for Children program, which covers children enrolled in Medicaid, children without health insurance, and Native American children, other children may qualify for assistance through a Federally Qualified Health Center or Rural Health Center.⁴ There is a factsheet on hepatitis A available on the South Dakota Department of Health web page (<http://www.state.sd.us/doh/Pubs/hepa.htm>) that can be used to answer questions or stimulate discussion between the patient and healthcare provider about the disease and vaccine.

There is at least one straightforward part of this question. There is no controversy at this time about the vaccine products available. Both have been proven effective and safe for patients older than 2 years (24 months) of age. Although it is always possible to see unexpected side effects with increased administration, common side effects to date are pain at the injection site, headache, feeding problems (in children), malaise (in adults) and induration of the injection site.²

There are several factors to consider when deciding whether or not to recommend hepatitis A vaccination for a child. First, you must decide whether or not you

want to recommend universal childhood vaccination. If not universal vaccination, you must consider individual patient factors, such as risk of infection with hepatitis A. Several patient groups have been shown to be at increased risk of developing hepatitis A, including Native Americans, Alaskan Natives, and Hispanic populations.² South Dakota does have a significant number of people in a population considered at higher risk for developing the disease. For many families, cost may be an issue, although the available vaccines are relatively inexpensive; perhaps a family that wants the vaccination qualifies for vaccine through the Vaccines for Children program.

What does a pediatric pharmacist recommend? At this time I feel that universal vaccination of all children in South Dakota is unwarranted because of the latest statistics on the disease in South Dakota and the cost of routine vaccination. I think that healthcare providers should look at each patient individually and decide whether or not to recommend the hepatitis A vaccine. I also think the patient's parents should be made aware of the availability of the vaccine and be allowed to take part in the decision of whether to vaccinate their child against hepatitis A. In addition, we should continue to watch the disease trends in our state and adjust opinions on an "as needed" basis.

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The Payment Error Prevention Program

South Dakota Foundation for Medical Care

What is the Payment Error Prevention Program (PEPP)?

The Payment Error Prevention Program is a new administrative quality improvement program that HCFA has mandated PROs to carry out in addition to their clinical quality improvement projects conducted under HCQIP.

What is the goal of PEPP?

The focus of PEPP is to make sure that Medicare reimbursements are correct. The Payment Error Prevention Program only addresses the inpatient PPS hospital setting. The specific goals for our first contract year beginning February 1, 2000, are to reduce medically unnecessary admissions and the amount of DRG miscoding.

Will physicians be affected by PEPP?

The Payment Error Prevention Program addresses hospital DRG payment issues, not physician payments. However, physicians are responsible for providing the medical record documentation that is the basis for the diagnostic and procedural coding and the DRG assignment. Physicians are also responsible for determining whether or not a patient is admitted to the hospital. And, thus, we do expect to work with physicians to improve medical record documentation to support complete and accurate coding and to clarify Medicare guidelines related to the medical necessity of inpatient admissions.

Simple vs complex pneumonia will be focus DRGs for SDFMC.

The South Dakota Foundation for Medical Care will focus on DRG 079/080 VS 089/090, as our first PEPP project. This project is intended to identify possible billing errors in South Dakota healthcare facilities with the DRGs 089 (Simple Pneumonia, Pleurisy, age >17 w/CC) and 090 (Simple Pneumonia, Pleurisy, age >17 w/out CC) to DRGs 079 (Respiratory Infections, Inflammations, age >17 w/CC) and 080 (Respiratory Infection, Inflammations, age >17 w/out CC). The South Dakota Foundation for Medical Care will approach this program in the same manner used in our HCQIP quality improvement projects. We will analyze data, looking for areas where there is a trend or pattern that may suggest incorrect coding or unnecessary admissions. We will then examine medical records to determine if our concerns are validated. All providers will be receiving baseline project reports for comparative analysis of their facilities.

The Payment Error Prevention Program will deal with the complexities and confusion in the Medicare system in a collaborative manner. We're here to serve the health care community with training, answering questions, and helping set up systems to avoid potential payment billing errors.

What do you see as the long-term impact from PEPP?

Ultimately, improvements in the quality of health care data. We hope that PEPP will contribute towards building a solid technical infrastructure for payment issues.

Gerald E. Tracy, MD
Medical Director

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Doctor, Can We Talk?

Physician-Patient Communication Issues That Could Jeopardize Patient Trust In The Physician

Judith A. Winter, PhD; Sioux Falls, SD

ABSTRACT

The essences of the prostate cancer experience were explored through interviews with ten early-stage prostate cancer patients who were approximately one year post surgical treatment. One theme that emerged from this modified phenomenological study dealt with the relationships patients had with their physicians. One of the major concerns expressed by the study participants was a lack of communication with their physicians. The study provides evidence that physicians and other healthcare providers should work more diligently with patient communication in order to provide patients with a full understanding of their disease, treatment options, and potential adverse outcomes from treatment.

Communication is defined by the Webster dictionary¹ as the exchange of ideas, messages or information, and to communicate is to make known, disclose or to transmit. We communicate constantly in day-to-day life by verbal exchanges, written word, facial expressions, and body language. One's spouse can predict what kind of temperament we will have during the day by our first words or lack of words in the morning. Perhaps a look or groan will tell the story. We greet the neighbor with a smile or wave as we pass by them on the way to the office, and communication occurs. It has been claimed that the person on the other end of the telephone will be more receptive to our conversation if we smile while talking.

Just as in day-to-day living, one must not discount the importance of good communication between physician and patient. What does a physician's facial expression or other body language reveal to the patient when there is bad news about their health? How rushed is the physician when he or she sees the patient in their office and how does the patient perceive this communication? Should the physician take the time to hear the patient's story before presenting a prognosis or treatment? How important is personal communication in the age of the computer and the Internet? Is modern technology foreclosing the ability or the desire to provide personal, one-on-one physician-patient relationships?

The research for my doctoral dissertation, titled *Prostate Cancer Patients: A Descriptive Study of Quality of Life*,² reported a high level of patient frustration

created by the lack of communication between patient and physician. The problems addressed by these patients included the insensitive way physicians revealed the seriousness of their disease, the lack of time to discuss the diagnosis, treatment and treatment outcomes, and perceived unwillingness by the physician to assist the patient in learning about their disease. Study participants made the following comments:

And then I came home one night after work, about six o'clock PM; sitting down to eat, phone rang and I went and answered the phone. And it was the partner of this doctor. He says, "... you've got cancer in four out of six biopsies. See you later." This was doctor sensitive. That's how it was presented to me.

And I was in the midst of the meeting, and she (the nurse) said, "Well, you know this is what it is." She told me that over the phone that it was cancer. I thought it was rather unusual that, you know, that they didn't say, "Well, why don't you come into the office?"

I liked the man (the urologist) personally, and he was honest with me ... And I didn't spend a lot of time shopping (for an urologist). Sometimes I wonder about (him), but he's awful busy.

Oh, he's (the urologist) young. Sort of seems to be in a hurry ... But there is always that kind of hurriedness. Maybe that is true of other doctors as well. If there were one thing I would change, it would be that. Because I think, with the body

language that doctors give us, they can kind of give the idea that, "Hey, I'm not going to bother him today."

I asked him (the urologist) what you would do if you were in my place. He said he wouldn't even come close to answering that. He says, "That decision is up to you."

Going in and having it (radical retropubic prostatectomy) done with almost no conversation or verbal exchange with the doctor . . . I says, "Well, what do you recommend?" He says, "Well, the decision is yours." Didn't say, "Well, why don't you wait a couple years." He put it right back on my shoulders. And that made me feel . . . my anxiety level went up at that point.

And then the verbal exchange that we had after the positive biopsy was limited. The doctor said there is a lot of written material out there; did not offer me any. It was like, go find it yourself.

I'm really pleased with my doctor. Don't misunderstand, but I think he did not inform me. I think he let me find things out. Course I knew that impotence was a possibility, but ah, he threw a curve at me. I was laying, ready to go into the operating room and he says, he comes in there and I'd been prepped. He says that if the cancer is not contained in the prostate, I probably won't remove the prostate. He says, um . . . could I have your permission for castration?

Before the 1970s and 1980s the relationship between patient and physician was mostly paternalistic. The patient or their family had little participation in the healthcare decisions and rarely, if ever, questioned the physician's treatment choice. Physicians exercised "therapeutic privilege" and may have withheld a poor prognosis to spare the patient from depression or other negative outcomes. These physicians held beliefs that patients should be offered hope, even if it was false hope.^{3,4}

This philosophy was developed in part by early physicians, spiritual and religious leaders, and philosophers. In 1803, Thomas Percival argued, "To a patient . . . who makes inquiries which, if faithfully answered, might prove fatal to him, it would be a gross and unfeeling wrong to tell the truth."^{5,6} In 1936, Rev. Russell Dicks and Richard Cabot wrote about the heroism of dying and the privilege of sharing in the patients' extremity.^{5,7} About the same time, Lawrence Henderson, a physician and chemist cautioned physicians to be sure that they show sincere concern for the patient when they said, "to modify [the patient's] sentiments to his own advantage, and remember that . . . nothing is more effective than arousing . . . the belief

that you are concerned whole-heartedly and exclusively for his welfare."^{5,8} In 1950, Sperry, of the Harvard Divinity School, cautioned against errors in diagnosis and prognosis, and deplored the outspokenness of his physician colleagues.⁹ He said telling truth to the patient depended on the physician's knowledge of the patient and the patient's frame of mind. Thus, the diagnosis of cancer was rarely revealed by physicians prior to the 1970s.^{4,5}

Since the 1970s, the paradigm has changed. Patients began to ask questions. No longer would a demeaning, authoritative or dictatorial relationship be looked at as appropriate physician behavior. Patient decision making now supports the principle of patient autonomy or patient centered decision making.^{10,11} Patients are most always told the truth regarding the diagnosis and prognosis, as well as the risks and benefits of treatment. Patients are allowed and encouraged to become involved in treatment and to assist in making the decision on the care to be rendered.³⁻⁵ Even if the physician suspects the truth could be unbearable, Radovsky believes 1) the doctor is not always wise enough to analyze the patient completely to know for sure; 2) shielding the patient is ultimately impossible and may produce a sense of betrayal; 3) dying is unpredictable in occurrence and a patient deserves a chance to survey their life; and, 4) not being truthful may be a reluctance by the physician to admit failure of prevention or cure, or an unworthy desire to control.^{5,12}

Managed care is sometimes blamed for affecting the relationship between the patient and the physician in that physicians are charged with spending less time with the patient in order to be more productive.¹³ This shortened time period for office visits forces the patient to take better care of themselves and to be fully prepared for their visit with the physician. Patients can maximize the office visit by being prepared with questions and concerns about their disease.

In my doctoral study, most patients did not feel that they had adequate information on their disease to ask appropriate questions. Others were concerned about taking too much of the physician's time and did not ask their questions. There are several treatment options for men diagnosed with prostate cancer and therefore a patient who wishes to be informed about their disease and the right treatment must work hard to gather the information. It has been shown that an educated patient is more empowered to deal more effectively with the healthcare professional and with treatment choices.^{14,15} However, the question of how much information is desirable or beneficial remains.¹⁶

The physician plays a crucial role in the education of the patient and in assessing new and established therapies. Clear communication between patient and

physician is extremely important in the decision-making process. The physician must listen carefully to the patient and encourage him or her to tell their story.^{14,17,18} Quality of life outcomes, in addition to survival data, are important because some patients may prefer to select a treatment that has a lower survival rate if their quality of life will be superior.^{12,19,20} An evaluation of the patient's quality of life before treatment will give the physician a better sense of the appropriate treatment recommendation. Listening to the patient's story will help identify their psychological and physical wellbeing, symptom distress, nutritional status, interpersonal wellbeing, and other aspects of life. The physician would be well served to look at how the patient evaluates his own quality of life. It is important to note that the physician's assessment of a good quality of life may be different than the patient's view of what they want for their own life.

Studies have shown, when the physician involved both the patient and the family in their decision making, there was more satisfaction with the result of the treatment, regardless of the treatment choice.^{4,21} According to the literature, a good physician-patient relationship, where the patient perceives that he or she is receiving more personal care, will relate positively to patient compliance and decreases the chance that the patient will change physicians or medical facilities.^{4,22-24} Other studies showed that patients involved with treatment decisions had significantly more hope.^{4,25}

Patients who choose medical treatments according to their own values, beliefs, preferences, and life goals will be better served, and most patients want to be kept in charge.^{20,26,27} Blackhall et al suggested that physicians be sensitive to ethnicity and unspoken beliefs that may alter the usual manner of discussion of health problems and treatments, and that physicians may need to broaden their commitment to individual autonomy.^{10,28}

Spending more time with the patient, showing compassion, observing patient demeanor for clues to acceptance of the information, and presenting the right amount of information will build a level of trust between the physician and the patient.³ Physicians still have overwhelming influence and are usually trusted to give the patient accurate information.^{3,17} My doctoral study² reported that patients did trust their physicians and did not question the quality of care they received, even though some felt some level of frustration:

I really wanted this guy (the urologist) in Sioux Falls to do it (radical retropubic prostatectomy). And, and I can't explain why. He just, he gave me a real sense of confidence.

I felt very good about the physician down there, who did my, when they did my, when they did my bone scan, because he was right there . . . He was

right there and alleviated a lot of the apprehension.

As long as you have faith in them (physicians) what else can you do?

In summary, I believe that it is wrong for healthcare workers to draw conclusions on treatment for a patient without the opportunity for an in-depth interpersonal transaction between the patient and the healthcare worker. There needs to be time set aside for the physician or other healthcare worker to communicate with the patient and to fully understand the individual patient's job requirements, expectations for the future, type of support that the patient will have during the treatment and recovery, psychological and interpersonal wellbeing, physical stress, cultural and spiritual beliefs, and other important aspects of the patient's life story. Each patient's story is personal, unique, and very difficult to analyze statistically. So much can be gained from a dialogue with the patient addressing the symptoms, the details of the disease, the options for treatment, expected treatment outcomes, and the expectations for their quality of life, without which, I believe, no true satisfaction will be had with the process or the outcome.

The true challenge for physicians and other healthcare workers is to determine how to best facilitate this discussion. Who should be responsible for this important part of the diagnosis and treatment decision making process? It has become evident from my study that we must take the time necessary to develop better communication with the patient and their family or the trust placed in the physician will eventually erode. I believe that we should examine the possibility of patient-centered decision making with a team of professionals that would form around the patient to evaluate, educate, and assist with guiding the patient from treatment decision making through recovery and aftercare. These professionals, who could come from many disciplines depending on the disease, should function as a well-trained orchestra that is skillful, knowledgeable, and trained for a great musical outcome. Each professional working together as a team, partnered with healthcare companies and third party payors, would provide better, more efficient healthcare for the twenty-first century.

AUTHOR

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Letter To The Editor

Sirs:

We read with interest Creekmore's paper¹, concerning to low molecular weight heparins (LMWHs) in acute coronary syndromes, published in the *Journal* in January 2000. We would like to comment on some aspects of the paper.

First, Creekmore considered only the FRISC², FRIC³, ESSENCE⁴ and TIMI 11 B⁵ studies in his review and he said that "there have been four major trials to date evaluating the use of LMWHs in acute coronary syndromes". From these studies, the author concluded that there is no role for LMWHs after the hospital phase and that "the trials were unable to demonstrate a difference in mortality, or any individual component of the endpoints, after 30 days". The last clinical trial reviewed by Creekmore was the TIMI 11 B study⁵. The results of this trial were published in October of 1999 but previously, in August of 1999, the results of the FRISC II study⁶ were published and, surprisingly, their results were not analyzed in Creekmore's paper¹. Omission of analysis about the FRISC II study⁶ could give misinformation about the role of LMWHs in the after hospital phase treatment of the acute coronary syndromes. Moreover, the FRAX.I.S. study⁷, published in November of 1999, was not analyzed by Creekmore.

Briefly, the FRISC II study⁶ was a prospective, randomized, multicenter trial, with parallel groups and a factorial design, in which the efficacy of invasive versus non invasive treatment, as well as the long term dalteparin treatment versus placebo were evaluated in patients with unstable angina or non-Q wave myocardial infarction. In the comparison of dalteparin versus placebo, 2267 patients were included. Patients were initially treated with subcutaneous dalteparin at a dose of 120 IU/kg (maximum dose 10 000 IU) every 12 hours, for at least five days. After this initial treatment, patients received double-blind treatment with twice daily subcutaneous injections of dalteparin or placebo. Women who weighed less than 80 kg and men who weighed less than 70 kg, received dalteparin 5000 IU twice daily and men and women who weighed more than these values received 7500 IU twice daily. This regimen was continued for 3 months, with patients self-injecting prefilled single-dose syringes after discharge from the hospital. Aspirin was given to all patients on admission at an initial dose of 300-600 mg, followed by a maintenance dose of 75-320 mg once daily thereafter. β -blockade was given unless contraindicated. The primary endpoint was a composite of death and

myocardial infarction during the double-blind treatment period. In addition, the same events and the need for revascularization were assessed during the entire treatment period.

Analysis of the double-blind period of treatment evidenced the following outcomes: at 3 months there was a non-significant 19.0% relative and 1.3% absolute decrease in the primary composite endpoint of death and myocardial infarction in the dalteparin group. However, there was a significant 47.0% relative and 2.8% absolute decrease in death and myocardial infarction after 30 days (risk ratio: 0.53; 95% confidence interval: 0.35-0.80; $p = 0.002$). This benefit was still evident after 60 days.

Analysis of the total period of treatment evidenced a reduction of the primary endpoint at 1 month in the dalteparin group (risk ratio: 0.73; 95% confidence interval: 0.54-0.99; $p = 0.048$). In the total randomised cohort, including the open-label and double-blind treatment periods, there was a significant 4.3% absolute and 13% relative decrease in the triple composite endpoint of death, myocardial infarction and revascularization (risk ratio: 0.87; 95% confidence interval: 0.77-0.99; $p = 0.031$). During the first month there were significant decreases of the double (6.2% vs 8.4%) and triple endpoints (19.4% vs 25.6%) in the dalteparin group.

A substudy of the FRISC II study⁸ in 1266 patients with raised troponin-T concentrations evidenced a significant reduction of the composite endpoint of death and myocardial infarction at 3 months in the dalteparin group in comparison with the placebo group (12.5% vs 9%; $p < 0.05$). These results are in agreement with those from a previous substudy of the FRISC study⁹.

The FRAX.I.S study⁷ was designed to assess the benefit of short-term low molecular weight heparin nadroparin compared with unfractionated heparin in unstable angina or non-Q wave myocardial infarction patients and to determine whether a longer, 2 week molecular weight heparin regimen would offer additional clinical benefit. This was a prospective, randomized, double-blind and multicenter study in three parallel groups involving 3468 patients, that were randomized to intravenous unfractionated heparin for 6 ± 2 days, nadroparin for 6 ± 2 days, or nadroparin for 14 days. The unfractionated heparin group received an intravenous bolus of unfractionated heparin 5000 IU, followed by an activated partial thromboplastin time adjusted infusion of unfractionated heparin. Nadroparin

was administered at an initial intravenous dose of 86 anti-Xa IU/kg, followed by twice daily subcutaneous injections of 86 anti-Xa IU/kg. The primary endpoint was a composite of cardiac death, myocardial infarction, refractory angina and recurrence of unstable angina at day 14. No statistically significant differences were observed between the three treatment regimens.

From the results of the FRISC II study⁶ and the FRISC II substudy⁸, it seems clear that a prolonged treatment with dalteparin in two daily doses adjusted by weight and sex can benefit patients with acute coronary syndromes. According to Cohen¹⁰, resources and facilities to carry out early invasive therapy are not available in all countries, and it is not uncommon for patients to wait several months for their procedure and, moreover, a substantial proportion of patients are not always appropriate candidates for invasive therapy. These kinds of patients can probably benefit from prolonged treatment with dalteparin.

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Author's response to the **Letter to the Editor** from Javier Borja and Pere Olivella regarding the *South Dakota Journal of Medicine* article "Low Molecular Weight Heparins in Acute Coronary Syndrome" published in the January 2000 issue.

Sirs:

I appreciate the **Letter to the Editor** from Borja and Olivella. Perhaps the FRISC II study should have been included in my original article, so I welcome the opportunity to comment on it now. The FRAX.I.S. study was published as the manuscript for my original article was being prepared and could not have been included, but again, I welcome the opportunity to comment.

The FRISC II and the FRAX.I.S. were well summarized by Borja and Olivella except for their

omission of safety data. I believe this safety data is an important component of these studies and must be taken into consideration when making patient care decisions.

In FRISC II, while prolonged dalteparin was shown to be superior to placebo with some composite endpoints at some time intervals, the pre-assigned primary endpoint of death or myocardial infarction during the double blind treatment period was not statistically different for dalteparin versus placebo. Sub-studies of FRISC and FRISC II do point out that patients with elevated troponin T levels may benefit from prolonged low molecular weight heparin therapy, but safety must

also be considered. In FRISC II, there were more than twice the major bleeds in the dalteparin group than the placebo group (3.3% versus 1.5%) and almost three times the minor bleeds (23% versus 8.4%).

No difference was found with FRAX.I.S. between using unfractionated heparin, nadroparin for six days or nadroparin for 14 days when treating patients with unstable angina or non-Q wave MI. At day 14, major bleeding was reported to be 3.5% for the 14 day nadroparin group, compared to 1.6% and 1.5% for the unfractionated heparin group and six day nadroparin group respectively. This study seems to confirm the results of FRISC, FRIC, FRISC II, and TIMI 11B. Treatment of acute coronary syndromes with low molecular weight heparins past the acute phase is of unproved benefit and may significantly increase the risk of major hemorrhage.

There may be high-risk patients with elevated troponin T levels that are unable to undergo an invasive procedure and might benefit from prolonged therapy with low molecular weight heparins. A study specifically designed to test this hypothesis needs to be conducted. In the meantime, if prolonged therapy with low molecular weight heparins is used in these patients, the risk to benefit ratio must be carefully weighed, as FRISC II and FRAX.I.S. have shown the risk of major hemorrhage is increased by more than two-fold.

Respectfully,
Freddy Creekmore, PharmD, BCPS

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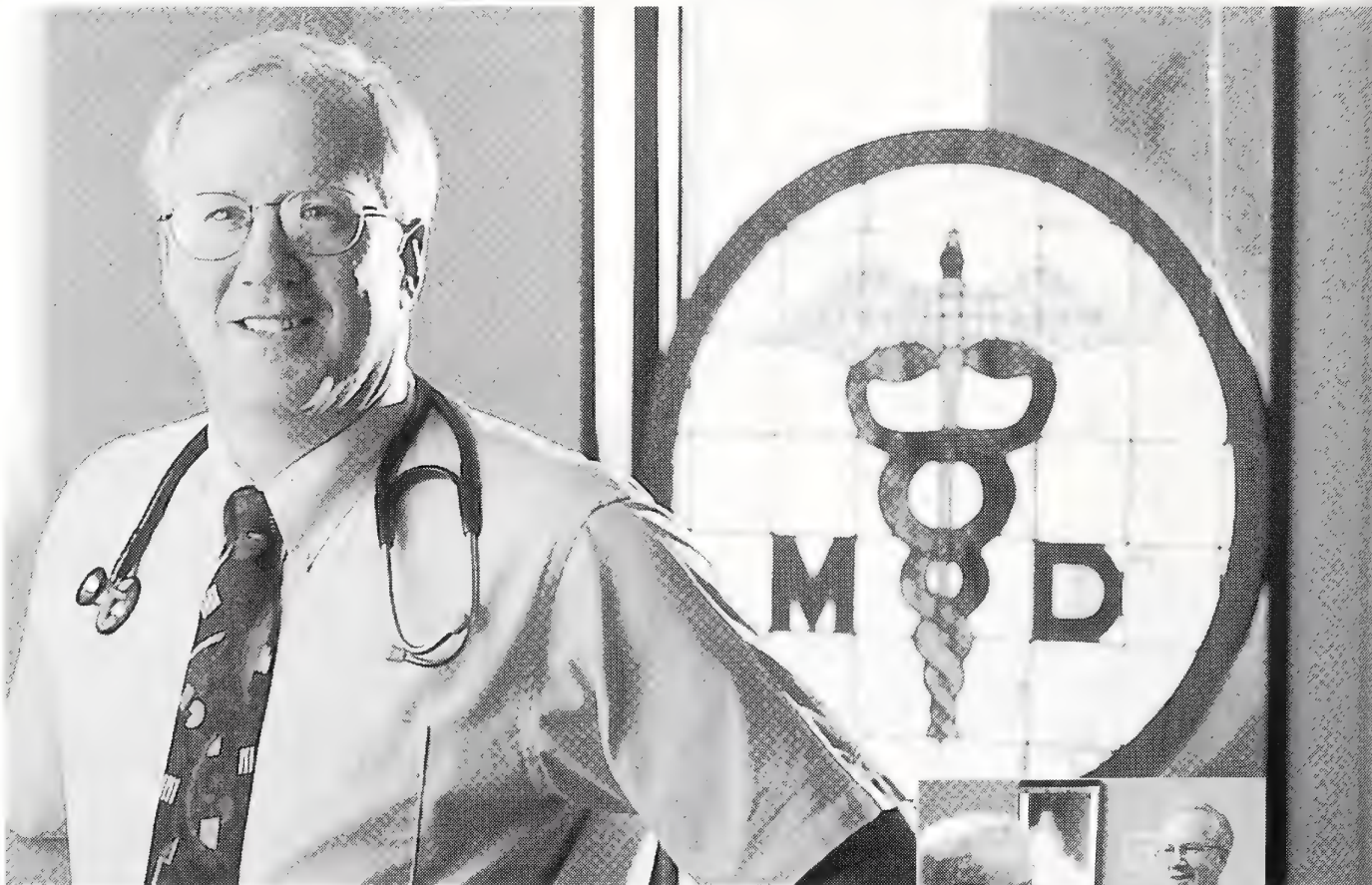
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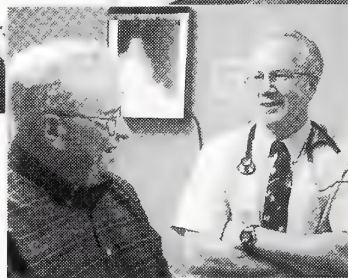
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South Dakota's Own

Epidemiology Of Diphtheria In South Dakota

Anne Golaz, MD, MPH; Susan Lance-Parker, DVM, PhD; Thomas Welty, MD, MPH; Linda Schaefer; LaJean Volmer; Carol LaFromboise, MPH; Julie Dixon, DO; Tom Haase; Chung Kim; Tanja Popovic, MD, PhD; Kristine Bisgard, DVM, MPH; Peter Strebel, MD, MPH; Melinda Wharton, MD, MPH

ABSTRACT

Respiratory diphtheria was one of the most common causes of death among children in the pre-vaccine era. Since the introduction of diphtheria toxoid vaccine in 1920s, and its widespread use by the late 1940s, diphtheria became increasingly rare in the United States. However, through the 1970s diphtheria remained endemic in some states, with reported incidence rates >1.0 per million population in six states (Alaska, Arizona, Montana, New Mexico, South Dakota, and Washington). Starting in 1980, less than five cases have been reported each year in the United States. The majority of culture-confirmed cases have been associated with importation from other countries. Toxigenic *Corynebacterium diphtheriae*, the organism causing diphtheria, was thought to have become rare or even have disappeared from previously endemic areas such as South Dakota. However, during four months in 1996, 11 persons (one index case, six patients and four household contacts) in an American Indian community in South Dakota were found to be infected by *C. diphtheriae*; six of these isolates were toxigenic. The findings in this report indicate that despite 20 years without reported respiratory diphtheria cases, toxigenic *C. diphtheriae* is still present in South Dakota. The continuous circulation of toxigenic strains of *C. diphtheriae* emphasizes the need for health care providers throughout South Dakota to promote timely vaccination against diphtheria among persons of all ages and ethnic groups, to be aware of the clinical signs and symptoms of diphtheria so that cases can be promptly diagnosed and treated, and further public health measures can be taken to contain this serious disease.

INTRODUCTION

Diphtheria was one of the most common causes of death among children in the pre-vaccine era. In the United States, the highest number of reported diphtheria cases was 206,939 in 1921 (incidence rate: 190 cases per 100,000 population), of which 15,520 cases were fatal (case fatality ratio: 7.5%). Since the introduction of diphtheria toxoid vaccine in the 1920s, and its widespread use by the late 1940s, diphtheria became increasingly rare in the United States. The number of cases of diphtheria reported annually declined from 18,675 in 1945 to three in 1980. Diphtheria remained endemic in some states through the 1970s, with highest incidence rates (>1.0 per million population) in six states (Alaska, Arizona, Montana, New Mexico, South Dakota and Washington), especially among economically disadvantaged minorities.¹ Cutaneous diphtheria cases

accounted for a third of all reported cases in the 1970s. In 1980, cases of cutaneous diphtheria ceased being nationally notifiable. Starting in 1980, less than five cases have been reported each year in the United States. During 1980-1995, a total of 41 respiratory diphtheria cases were reported in the U.S.; of these, four (10%) were fatal, all in unvaccinated children.² From 1986 to 1995, most reported cases from which *C. diphtheriae* was isolated were related to importation and the organism was thought to have become rare or even to have disappeared from previously endemic areas such as South Dakota. However, in 1996, both toxigenic and non-toxigenic strains were isolated in South Dakota. This report presents: 1) the results of enhanced surveillance for *C. diphtheriae* infections that was instituted in 1996 in a Public Health Service (PHS) hospital in South Dakota after a case of blood infection

with toxigenic *C. diphtheriae* was identified and 2) diphtheria surveillance data in South Dakota from the 1920s through the 1990s.

1) CASE REPORT, JUNE 1996, SOUTH DAKOTA

On June 1, 1996, a 62-year-old American Indian woman with a history of chronic alcoholism and severe necrotizing skin ulcers on both legs was admitted to a Public Health Service Hospital in South Dakota for alcohol intoxication and infected leg ulcers.³ She was treated with ampicillin and received split-thickness skin grafts on both legs. She was discharged on June 19. A blood culture taken on June 1 was sent to a regional reference laboratory and *C. diphtheriae* biotype mitis was identified. At the CDC Diphtheria Laboratory this isolate was subsequently shown to be toxigenic. No cultures were obtained from the patient's throat or skin ulcers during her hospitalization. The patient had received a dose of adult formulation tetanus and diphtheria toxoid vaccine (Td) in 1984 and in 1994.

In response to this case, the South Dakota Department of Health (SDDOH), the Aberdeen Indian Health Service Area Office and the Centers for Disease Control and Prevention (CDC) initiated enhanced surveillance for *C. diphtheriae* infections in the community where the patient lived.

Enhanced diphtheria surveillance, August through October, 1996

During August 1- October 7, 1996, persons presenting to the PHS hospital and three satellite clinics for evaluation of pharyngitis, draining middle-ear infections, or skin ulcers were cultured for *C. diphtheriae* as part of their routine clinical care.³

Specimens were obtained from 133 patients. Of the 133 swabs, 113 (85%) were collected from the

oropharynx, 13 (10%) were collected from skin ulcers or wounds and seven (5%) were collected from ear drainage. *C. diphtheriae* was isolated from six (4.5%) of the 133 patients; two of six isolates were toxigenic by the Elek test (Table 1). Ages of the six culture-positive patients ranged from 3 to 60 years; four were school-aged children (age 7 to 15 years) and three (50%) were females. Five of the six patients reported sore throat, and the remaining patient presented with otitis media. In one of the culture-positive patients a pharyngeal membrane was present at the time of her initial presentation. This patient was subsequently reported to CDC as a case of respiratory diphtheria. Three patients had been fully vaccinated, one 8-year-old child had received only three doses of diphtheria and tetanus toxoid-containing vaccine combined with whole-cell pertussis vaccine (DTP), one 8-year-old had received a Td booster instead of a fifth dose of DTP and a 60-year old adult had not received a Td booster in the last 12 years. In addition to *C. diphtheriae*, three patients were culture-positive for β -hemolytic *Streptococcus* (one each of Group A, Group C, and Group G), and one patient was also culture-positive for *Corynebacterium pseudodiphtheriticum*. All six patients were treated with penicillin or a cephalosporin and received vaccination if necessary.

The primary-care providers of the six culture-positive patients were informed of the surveillance findings and public health nurses and SDDOH staff investigated the household contacts of the patients from whom isolates were obtained. Of the 14 household contacts from whom cultures were obtained, *C. diphtheriae* was isolated from four, constituting three households (Table 2). In two households, multiple biotypes were isolated from family members. Household contacts received penicillin regardless of

Table 1. Patients with *C. diphtheriae* isolates, South Dakota, August-October 1996.

Patient	Symptoms	Age	Sex	Site of specimen collection	Biotype	Toxigenicity
Index patient June 1996	Leg ulcers	62	F	Blood	Mitis	Toxigenic
1	Pharyngitis, labored breathing	3	F	Throat	Mitis	Non toxigenic
2	Suppurative otitis media	8	M	Ear	Gravis	Non toxigenic
3	Exudative pharyngitis	8	M	Throat	Gravis	Toxigenic
4	Pharyngitis with membrane	15	F	Throat	Mitis	Non toxigenic
5	Exudative tonsillitis	60	M	Throat	Gravis	Toxigenic
6	Tonsillitis, pharyngitis, fever	7	F	Throat	Gravis	Non toxigenic

Table 2. Contacts to patients with *C. diphtheriae* isolates, South Dakota, August-October 1996.

Contacts	Relation to patients	Age	Sex	Site of specimen collection	Biotype	Toxigenicity
7	Mother of pt. 1	30	F	Throat	Gravis	Toxigenic
8	Sibling of pt. 3	13	F	Throat	Mitis	Toxigenic
9	Sibling of pt. 3	11	F	Throat	Mitis	Toxigenic
10	Sibling of pt. 4	13	M	Throat	Mitis	Non toxigenic

their infection status and a dose of diphtheria toxoid-containing vaccine if necessary.

Laboratory results

Of the eleven positive isolates obtained from seven patients and four close contacts, nine were from throat cultures, one from an ear drainage and one from a blood culture. Six isolates were shown to be toxigenic by the Elek gel diffusion test⁴ and by polymerase chain reaction testing (PCR), which can detect both A and B subunits of the diphtheria toxin gene, *tox*.⁵ Of the 11 isolates, six were of the biotype mitis and five were gravis. All 1996 toxigenic isolates were compared with 12 *C. diphtheriae* isolates obtained from other patients in South Dakota during 1979-1983 by ribotyping and multilocus enzyme electrophoresis.⁶ Both molecular methods indicated that the recent 1996 and the older isolates were genetically closely related to each other and differ from *C. diphtheriae* strains isolated either from other regions of the U.S. or from countries of the former Soviet Union experiencing epidemic diphtheria.

2) DIPHTHERIA IN SOUTH DAKOTA, 1923-1999

The number of cases of diphtheria reported annually to the State Board of Health declined from 719 in 1923 to 17 in 1950 (Figure 1). Surveillance data provides no information on age or vaccination history. There is no annual data available between 1951 and 1953. From

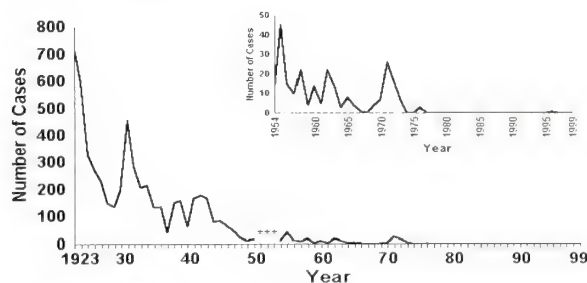
1954 to 1976, a total of 244 diphtheria cases were reported to the SDDOH. From 1954 to 1959, the annual incidence rate was 2.8 per 100,000, from 1960 to 1969, 1.1 per 100,000 and from 1970 to 1976, 1.3 per 100,000. In 1976, the last case of respiratory diphtheria was reported in a Caucasian woman living on one of the reservations and then, for the next 20 years, no cases were reported to the SDDOH until 1996. In 1996, one of the six patients with a positive culture for *C. diphtheriae*, presented in this paper, whose symptoms and signs met the clinical case definition of respiratory diphtheria, was reported as a case. Between 1954 and 1976, 6 counties -Bennett, Walworth, Corson, Shannon, Roberts and Charles Mix- reported more than 14 cases each (county of origin not available before 1954). (Figure 2).

The SDDOH Laboratory continued screening for *C. diphtheriae* until 1981, when performing free cultures for *C. diphtheriae* was dropped for budgetary reasons. Although no cases of respiratory diphtheria were reported during that period, the organism was still identified in clinical specimens, demonstrating its continuous presence in the state. From 1975 to 1981, *C. diphtheriae* was isolated in 302 specimens obtained for Strep culture and screened for *C. diphtheriae* (SD Department of Health, unpublished data). A quarter of them were toxigenic strains. The biotypes of these isolates were the following: 56% were mitis strains, 32% gravis, 9% intermedius and 3% belfanti. After 1981, culture for *C. diphtheriae* were not performed any more at the SDDOH. The 1996 enhanced surveillance results prompted the state laboratory to resume culturing and and toxigenicity testing for *C. diphtheriae*.

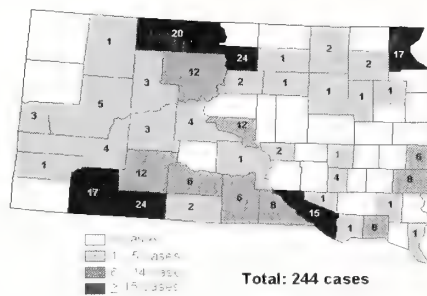
DISCUSSION

Enhanced surveillance conducted in 1996 indicates that despite 20 years without reported diphtheria cases, toxigenic *C. diphtheriae* is still present in at least one community in South Dakota, a state that was previously endemic for this potentially lethal but preventable disease. Molecular analysis suggests continuous circulation of

**Figure 1. Reported Diphtheria Cases
South Dakota 1923 - 1999**



**Figure 2. Reported Diphtheria Cases by County
South Dakota 1954 - 1976**



the organism in this community despite the absence of reported cases between 1976 and 1996. A similar situation of long-standing circulation of endemic toxigenic strains exists in native populations in Canada.⁷

The absence of reported cases of respiratory diphtheria in this American Indian community during the past twenty years suggests a high level of vaccine-related or natural immunity in the population or under reporting of clinical cases of diphtheria. Four of six patients were co-infected with another organism; therefore the extent to which the pharyngitis in these patients was caused by *C. diphtheriae* or by other pathogens can not be determined. Only one of these patients presented symptoms and signs meeting the clinical case definition of respiratory diphtheria.⁸ Immunized persons have less severe disease when infected but may remain asymptomatic carriers.¹

Further evaluations are under way in the community to define factors associated with endemicity of *C. diphtheriae*, to assess DTP/DTaP vaccination coverage among children, to determine seroprevalence of diphtheria antibody among adults and to assess the role of the cutaneous form of diphtheria in transmitting toxigenic *C. diphtheriae*. In a follow-up visit, five months after her hospitalization in June 1996, the index patient's skin ulcers were culture-negative for *C. diphtheriae* but PCR positive for the *tox* gene suggesting that she might have been suffering from cutaneous diphtheria. Transmission of *C. diphtheriae* infections from skin lesions to skin lesions and between respiratory tract and skin lesions has been described.⁹

The recent epidemic in the former Soviet Union demonstrates that diphtheria can re-emerge after years of decline and near elimination.¹⁰ Although the risk of resurgence of diphtheria in the United States is low, public health authorities must ensure that the capacity to recognize, diagnose and control diphtheria is maintained. Surveillance should be enhanced in areas where diphtheria was previously endemic. Clinicians

should consider diphtheria in the differential diagnosis of patients presenting with a sore throat, low-grade fever and an adherent membrane of the tonsil(s), pharynx, and/or nose. A diphtheria fact sheet is available for health care providers in South Dakota to help raise awareness about diphtheria (addendum 1). Because the successful isolation of *C. diphtheriae* depends on rapid inoculation of special culture media, the state laboratory should be notified as soon as the diagnosis is suspected. Whenever a diagnosis of diphtheria is strongly suspected, state public-health officials should be notified immediately, and measures to prevent additional cases should be instituted.¹¹ As of January 1997,

diphtheria antitoxin is no longer commercially available in the United States but may be obtained for treatment of suspected cases of diphtheria through the CDC diphtheria duty officer [telephone: (404) 639-2889].

While *C. diphtheriae* was isolated in an American Indian community, the documented presence of the organism in the state emphasizes the need for health care providers throughout South Dakota to promote timely vaccination against diphtheria among persons of all ages and ethnic groups and to be aware of the clinical signs and symptoms of diphtheria so that cases can be promptly diagnosed and treated, and further public health measures can be taken to contain this serious disease. Completing the routinely recommended childhood vaccination series for diphtheria and tetanus toxoids and pertussis vaccine (i.e., five doses of DTaP at the recommended ages) and achieving high vaccination levels (>90%) among preschool children are of particular importance in areas where diphtheria was previously endemic. In addition, booster doses of Td vaccine every 10 years are recommended throughout adulthood. Efforts are currently underway to educate the public and health care providers about the importance of vaccination.

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Addendum 1. DIPHtheria FACT SHEET

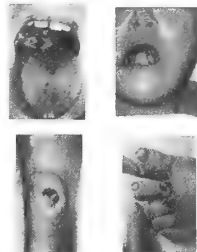
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DIPHtheria IN SOUTH DAKOTA

- ◆ Diphtheria is caused by *Corynebacterium diphtheriae* and has two forms: respiratory and cutaneous. The majority of cases of respiratory diphtheria are caused by toxin-producing (toxigenic) strains of *C. diphtheriae*. Patients may die from asphyxiation when the membrane obstructs breathing. Other complications include myocarditis and neuritis.
- ◆ Diphtheria was a major cause of mortality in children in the U.S. early in the twentieth century. With widespread use of diphtheria toxoid (with tetanus toxoid and pertussis vaccine, as DTP or DTaP) diphtheria became rare, and only a few cases are now reported each year in the U.S.
- ◆ In the 1970s, diphtheria was still endemic in South Dakota. The last case of respiratory diphtheria reported to the South Dakota Department of Health was in 1976.
- ◆ During August - September 1996, *Corynebacterium diphtheriae* was isolated from six patients attending an IHS Hospital in South Dakota (two strains were toxigenic). One patient's symptoms and signs met the clinical case definition for respiratory diphtheria (see *MMWR*, June 6, 1997, Vol. 46/ No. 22 p. 506-10).

Because toxigenic *Corynebacterium diphtheriae* is circulating in South Dakota:

- ◆ Clinicians should consider **respiratory diphtheria** in the differential diagnosis of children or adults presenting with:
 - a sore throat with an adherent membrane of the tonsil, pharynx, or nose
 - in severe cases, swelling of the neck
 - low-grade fever



Clinicians should also consider cutaneous diphtheria in the differential diagnosis of patients presenting with:

- skin lesions, especially non-healing chronic skin ulcers

Because *Corynebacterium diphtheriae* is not easily identified on standard media, physicians need to take a second swab after the usual swab for routine standard culture (group A Strep, etc) and send the second swab to the South Dakota Public Health Laboratory (SDPHL). For appropriate transport, please call the SDPHL at (605) 773-3368

o Because toxigenic *C. diphtheriae* is circulating in this community, it is essential that everyone be protected by timely vaccination against diphtheria.

◆ Assess immunization status of all children and adults

Children:

DTaP #1: 2 months old
DTaP #2: 4 months old
DTaP #3: 6 months old
DTaP #4: 15-18 months old
DTaP #5: between 4 and 6 years old
Td: between 11 and 16 years old

Adults: Td booster every ten years

For treatment of a suspected case of respiratory diphtheria and close contacts:
 contact the South Dakota State Health Department,
 (605) 773-3737 or 1-800-592-1861

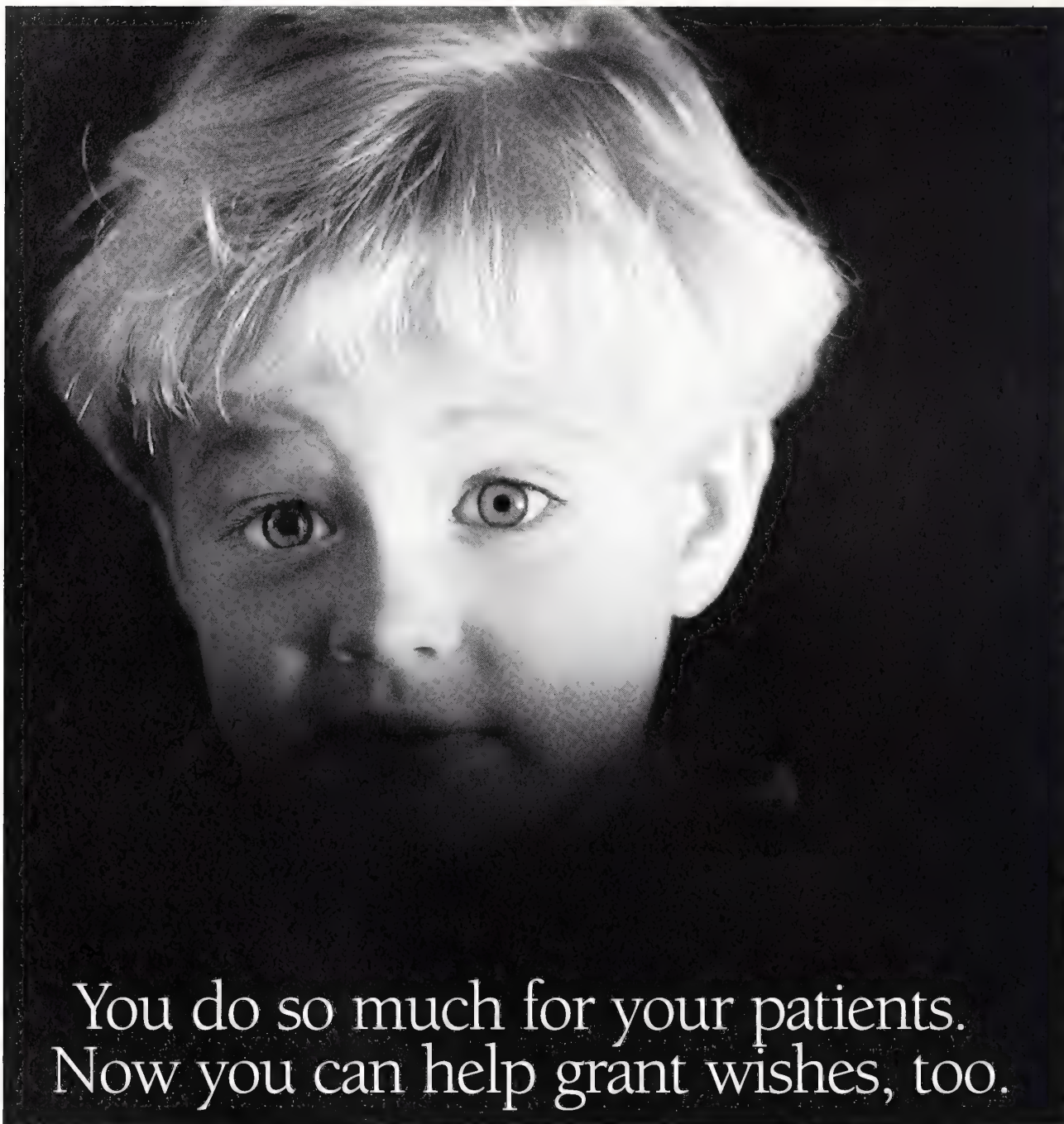
Treatment for diphtheria: Diphtheria antitoxin (available only at CDC. (404) 639-8255 office hours or (404) 639-2889 at all time)

Antibiotics (Erythromycin or penicillin G)

Immunization update if necessary

Additional information:

- Toxigenic *Corynebacterium diphtheriae* in a Northern Plains Indian Community, August September, 1996; *MMWR*, June 6, 1997, Vol. 46/No. 22; p 506-10.
- Karen Farizo: Fatal Respiratory Disease due to *Corynebacterium diphtheriae*; Case report and review of guidelines for management, investigation, and control; *Clinical Infectious Diseases* 1993; 16:59-68.



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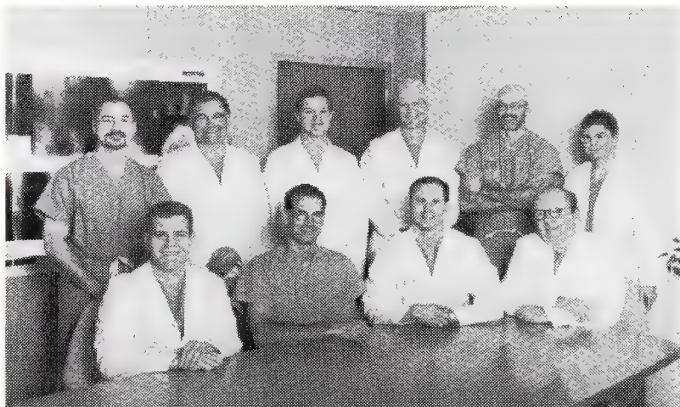
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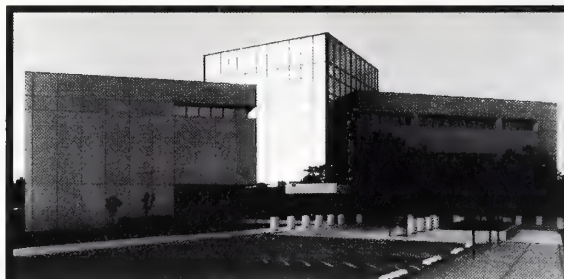
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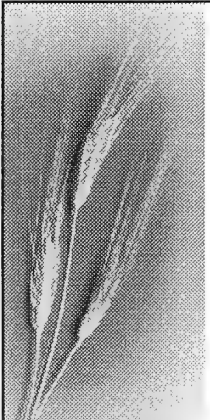


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CME Conferences

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced; Info: Sharon Sulzbach, 347-7145.

JULY 2000

- July 18 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- July 18 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- July 19 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- July 19 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- July 19 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- July 19 **USDSM Audio Conference** - - 12:30PM; (CST)/11:30 AM (MST); Speaker: Mark R. Green MD; Topic: Topoisomerase/Inhibition - Pancreatic Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- July 20 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- July 20 **Grand Rounds** - 6:30PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- July 20 **Neuroscience Grand Rounds** - 8:00AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- July 20 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- July 21 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- July 24 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- July 25 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- July 25 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Leslie W. Miller MD FACC; Topic: Cases in the Treatment of Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- July 25 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- July 26 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Leslie W. Miller MD FACC; Topic: Cases in the Treatment of Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- July 26 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- July 26 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- July 27 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- July 27 **Cardiovascular Conference** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- July 27 **Trauma Grand Rounds** - 12:00PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- July 27 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- July 27 **USDSM Audio Conference** - 11:30AM (CST)/10:30AM (MST); Speaker: Mark R. Green MD; Topic: Topoisomerase I Inhibition - Pancreatic Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- July 28 **Tumor Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- July 28 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.

AUGUST 2000

- Aug 1 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 1 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 2 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Aug 2 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Aug 2 **Internal Medicine Grand Rounds** - 7:30AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Aug 2 **Internal Medicine, Tumor Conference** - 8:00AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Aug 3 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 3 **Grand Rounds** - - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Aug 3 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Aug 4 **Morbidity/Mortality Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Aug 4 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Aug 8 **CPR Certification/Recertification** - 7:00PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Aug 8 **Geriatric Forum** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Aug 8 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 9 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Aug 9 **Internal Medicine Grand Rounds** - 7:30AM; McKennan Hospital Auditorium; Michelle Peters - 357-1366.
- Aug 9 **Geriatric Grand Rounds** - 12:00PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Aug 10 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 10 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Aug 11 **Pathology Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Aug 11 **Physicians Continuing Education** - 7:30AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Aug 14 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Aug 14 **Clinical Pathology Conference** - 8:00AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Aug 15 **USDSM Audio Conference** - - 12:00PM; (CST)/11:00 AM (MST); Speaker: William F. Keane MD; Topic: The HOPE Study and Clinical Practice; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Aug 15 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 15 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 16 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Aug 16 **CPC Wednesday Noon Conference** - 12:00PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Aug 16 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Aug 17 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 17 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Aug 17 **Neuroscience Grand Rounds** - 8:00AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.

- Aug 17 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Aug 18 **Psychiatry Grand Rounds** - 12:00PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- 8/22 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 22 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 23 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: William F. Keane MD; Topic: The HOPE Study and Clinical Practice; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Aug 23 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Aug 23 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Aug 24 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 24 **Cardiovascular Conference** - 12:00PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Aug 24 **Trauma Grand Rounds** - 12:00PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Aug 24 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Aug 25 **Tumor Conference** - 12:30PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Aug 28 **Tumor Board** - 8:00AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Aug 29 **Tumor Conference** - 12:00PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 29 **Tumor Conference** - 7:00AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 30 **Physician Grand Rounds** - 12:00PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Aug 30 **Internal Medicine Grand Rounds** - 7:30AM; Sioux Valley Hospital Auditorium; Michelle Peters - 357-1366.
- Aug 31 **Tumor Conference, Avera Cancer Institute** - 12:00PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 31 **Cancer Conference** - 12:00PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

MISCELLANEOUS

JULY 2000

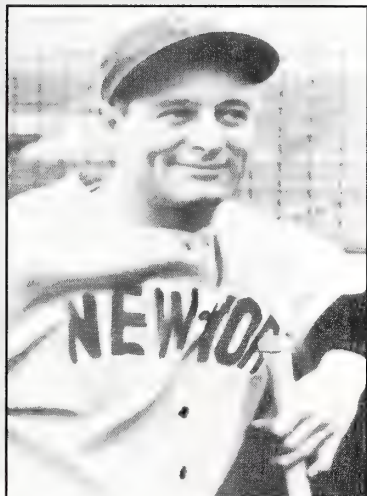
- Jul 9-13 **World Alzheimer Congress 2000: Pivotal Research**, Washington Hilton & Towers, Washington, DC. Fee: \$650. 15.5 hrs AMA Category 1 credit. Alzheimer's Disease and Related Disorders Association, Inc, 919 N Michigan Ave, Ste 1100, Chicago, IL 60611-1676. Phone: 312/335-8700. Fax: 312/335-1110. Email: alzheimers2000@alz.org. Internet: www.alz.org.
- Jul 13-14 **World Alzheimer Congress 2000: Bridging Research and Care**, Washington Hilton & Towers, Washington, DC. Fee: \$300. 11.75 hrs AMA Category 1 credit. Alzheimer's Disease and Related Disorders Association, Inc, 919 N Michigan Ave, Ste 1100, Chicago, IL 60611-1676. Phone: 312/335-8700. Fax: 312/335-1110. Email: alzheimers2000@alz.org. Internet: www.alz.org.
- Jul 15-18 **World Alzheimer Congress 2000: Creative Care**, Washington Hilton & Towers, Washington, DC. Fee: \$450. 20 hrs AMA Category 1 credit. Alzheimer's Disease and Related Disorders Association, Inc, 919 N Michigan Ave, Ste 1100, Chicago, IL 60611-1676. Phone: 312/335-8700. Fax: 312/335-1110. Email: alzheimers2000@alz.org. Internet: www.alz.org.

AUGUST 2000

- Aug 4-5 **Clinical Allergy for the Practicing Physician**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Blx 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Aug 6-8 **Fifth Annual Mountain Course - Success with Failure: New Strategies for the Evaluation and Treatment of Congestive Heart Failure**, Chateau Whistler, Whistler, British Columbia, Canada. Fee: \$500. 15 hrs AMA Category 1 credit. Mayo Foundation, Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Aug 18-19 **Inpatient Medicine: First Annual Midwest Regional NAIP Meeting**, Mayo Clinic, Rochester, MN. Fee: \$350. 11 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.

SEPTEMBER 2000

- Sept 9-13 **2000 National Conference on Correctional Health Care**, Cervantes Convention Center, St. Louis, MO. Fee: \$245. AMA Category 1 credit avail. National Commission on Correctional Health Care, PO Box 11117, Chicago, IL 60611. Phone: 773/880-1460. Fax: 773-880-2424. Internet:
- Sept 14-16 **Practical Surgical Pathology**, Leighton Auditorium, Siebens Medical Education, Mayo Clinic, Rochester, MN. Fee: \$600. 16 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet:
- Sept 15 **Early Lung Cancer: Path to Cure**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Blx 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email:
- Sept 15-16 **Advanced Life Support in Obstetrics**, Hennepin County Medical Center, Minneapolis, MN. AMA Category 1 credit avail. HCMC Continuing Medical Education, Hennepin County Med Ctr, 701 Park Ave, Mail Code 861-B, Minneapolis, MN 55415-1829. Phone: 612/347-2075. Email:
- Sept 18-21 **Managing People and Managing Care: Contemporary Management Practices in Health Care**, Oak Ridge Conference Ctr, Chaska, MN. Fee: \$1900. 33 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet:
- Sept 21-23 **Contemporary Cardiothoracic Surgery**, EPN Education Ctr, Washington Univ Medical Ctr, St. Louis, MO. Fee: \$625. 19 hrs AMA Category 1 credit. CME Washington University School of Medicine, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Sept 21-23 **Sixth Annual Current Topics in Cardiothoracic Anesthesia**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Blx 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email:
- Sept 22-23 **Mayo Clinic Update in Hepatology and Liver Transplantation**, Saint Paul Hotel, St. Paul, MN. Fee: \$400. 11 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet:
- Sept 28-29 **25th Annual South Dakota Perinatal Association Conference**, Rushmore Holiday Inn, Rapid City, SD. Fee: \$185. AMA Category 1 credit avail. Executive Director, SD Perinatal Association. Phone: 605/333-5210. Email: markk@siouxvalley.org



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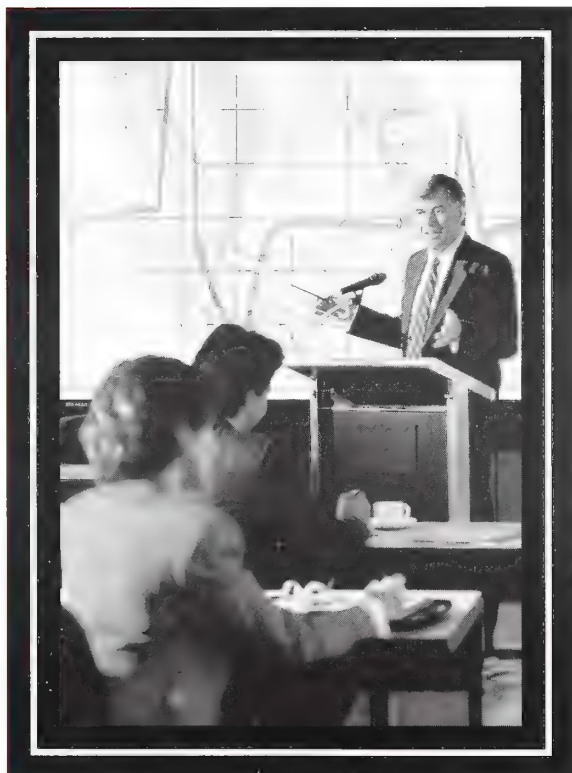
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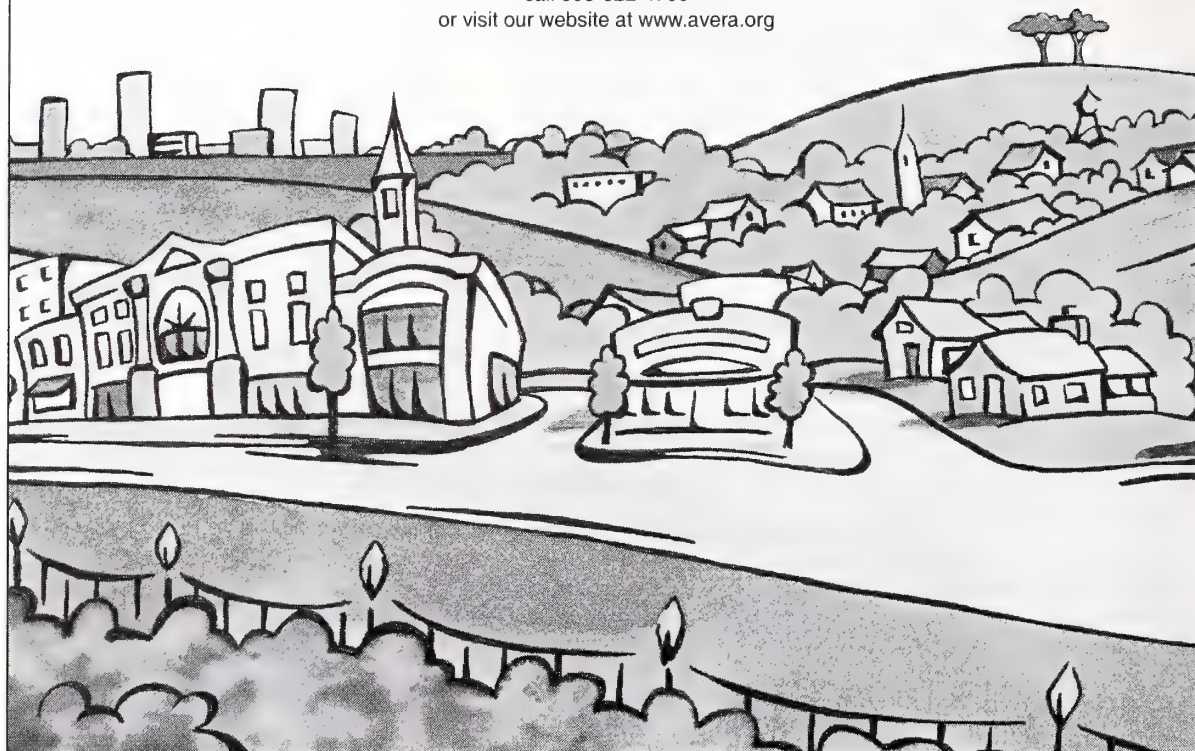
*"WE MUST CARE FOR PEOPLE IN SUCH A WAY,
that, whether or not we can physically cure their illness,
they find STRENGTH and COMFORT in knowing GOD'S ABIDING LOVE for them
despite their experience of chaos."*

*Excerpt from a pastoral letter on healthcare
by Joseph Cardinal Bernardin, former Archbishop of Chicago*

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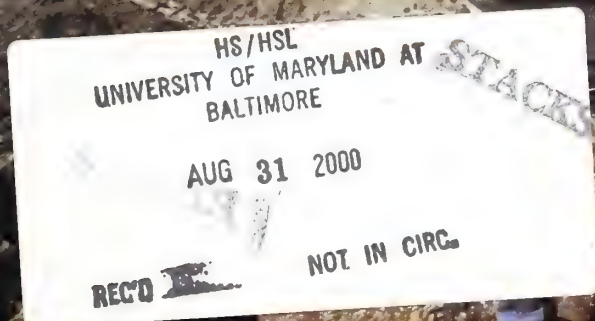


SOUTH DAKOTA

August 2000
Volume 33 Number 8

JOURNAL of MEDICINE

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She has been involved in clinical research with cervical and ovarian cancers. Dr. Bell has been published on a variety of topics dealing with cancer and cancer research. She plans on continuing her research efforts here in Sioux Falls.

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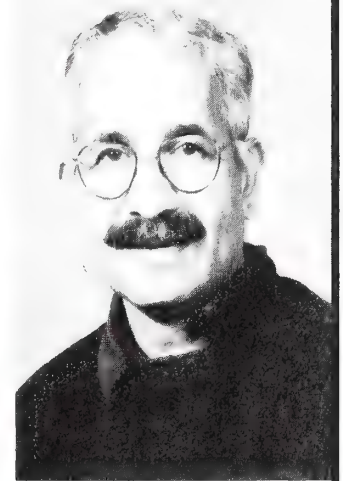
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despite their experience of chaos."*

*Excerpt from a pastoral letter on healthcare
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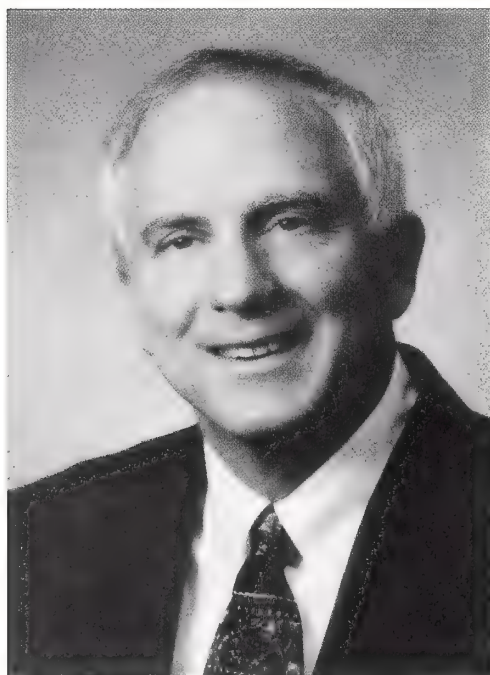
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About the Cover

"Atop Mt. Rushmore" - photo taken by Greg Latza, Peoplescapes, Sioux Falls, SD.

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

The next "Big Thing" in medicine is never announced by the president of the AMA. Its arrival is heralded by advertisements for seminars and consultants. Those fine folks who taught us to "think strategically about managed care," to "develop a seamless care delivery system," and to "collaborate for a 'win-win' situation," have moved on to the Internet. (Wouldn't you love it if the Chinese character for "win-win" turned out to also be the character for bankruptcy?)

So why now? First, the Internet has finally reached critical mass as a source of information and commerce in such a way that it affects everything, including medicine. Second, the web savvy baby-boomers are reaching the age where health care concerns become commonplace. Third, there is the specter of the Health Insurance Portability and Accountability Act (HIPAA) and the new regulations that will become effective 26 months after they are published this summer.

What's a doctor to do? We have to join the revolution. Within a year most physicians will have their own web site. The Council will likely approve putting a modified form of the SDSMA Member Directory on the Association's web page. In

conjunction with this, physicians who do not already have a web page will be given assistance in creating one. Medem is a company that designs web pages for the Internet. It is sponsored by the AMA and six specialty societies, and would most likely be our partner.

Dealing with the Internet generation is going to be more challenging for physicians. Most physicians are glad that patients are informed by quality Internet sites and it is not the empowered patient that is the worry. The vexing question is whether to interact with patients via email. I am not planning to do it. Physicians can gauge a situation in person or by phone, but a written message can lack clarity and urgency, leaving the patient at increased risk and the physician at increased liability. Another problem is that the volume of messages is uncontrollable. A doctor who walks his last patient out of the clinic at 5:30 pm, may walk into his office and find 27 more patient. We have a filtering system for other patient contacts whereby patient questions are triaged for proper and timely responses. If you plan to interact with patients using email, the Internet Working Group of the American Medical Informatics Association (amia.org) has precautions outlined in its *Guidelines of the Clinical Use of Electronic Mail with Patients*.

The HIPAA (1996) includes provisions to safeguard the confidentiality and security of electronic health information. Physicians fit into one of the three "covered entities" that bear the brunt of maintaining confidentiality. (And guess who will be civilly liable for violations of the rules?) If you or your clinic is thinking of using the Internet for transmitting any patient information and you are unaware of HIPAA, you need to turn off the computer and head to Las Vegas for the next seminar. Maybe you'll get lucky at roulette and have a "win-win" situation.



Karen Waltman, President
South Dakota State Medical Association Alliance

The health of Americans is getting more and more attention in the media. From the newest medical research finds to the latest trends in exercise and nutrition, people everywhere are re-evaluating their risk factors and current lifestyles in relation to their personal health and energy levels.

As members of the medical family, we are constantly dealing with the health of our communities. But when is the last time you took a health inventory of your immediate and extended family – including yourself? How do the people who mean the most to you stack up in the health wellness arena?

A few years ago, I was talking with a highly respected physician about the need for more people to take responsibility for their personal health. “If only people would take the time to get their annual exams, do self checks and be committed to healthier lifestyles.

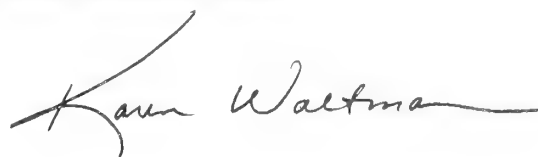
We can do so much with early detection. Many times our options are reduced as conditions are progressed. Early detection could help minimize the morbidity and mortality of many serious illnesses.” Perhaps doctors and their families need to take more time to practice what they preach.

On a personal note, a little over a year ago, I decided that my health needed more attention through better nutrition and increased physical exercise. Slowly and diligently I worked into an exercise program which has brought benefits along the way. I lost 27 lbs. and lowered my body fat to 20% which helped to stabilize an underlying hypertension. Currently I am training for the 22nd Annual Mount Rushmore International Marathon to be held in October, have increased energy, and give more to the people around me including my family, friends and community. In order to do my best for others, I’ve learned that I need to pay attention to my health including regular medical check-ups, a consistent exercise program and proper nutrition.

The ongoing encouragement from my husband, Steve, and daughters, Lindsey and Ashley, helped me to keep on track. My medical family came through for me and continues to support each other as we experience life’s health challenges together.

Due to the stress and commitment of providing to others, it is too easy for physicians and their families to neglect proper health habits for themselves. As we begin the new school year, I encourage each of you to visit with your families about this very important issue. Take time to schedule an appointment with your personal physician to discuss the steps you may need to take to lead a healthier lifestyle. Let’s live a long and healthy life together by practicing what we preach and sharing it even more with others around us.

Watch for the Alliance HEALTH CHECK PROJECT developed by Cathie Calhoon, SDSMA Alliance Health Promotion Chair, and Susan Tjarks, Health Check Project Chair, in the January edition of the **South Dakota Journal of Medicine**.





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Editorial

Being There



The office nurse and I moved rapidly down the hospital corridor. We still had several patients to see before starting in the clinic. The day seemed to portend too many obligations and insufficient time.

My companion had become an office nurse some 20 years earlier by virtue of having left full-time hospital work to join a physician practice. Even though she frequently participated in hospital rounds, she was still assigned an "office" designation in the eyes of the hospital staff. By implication, perhaps, she had escaped the rough and tumble world of acutely ill patients, and in so doing, abdicated the skills needed in that setting.

One of the patients whose room we darted into had been struggling with progressive liver failure. We arrived at a time of crisis. Carter had just rushed into the bathroom to have a bowel movement and sat down upon the toilet without lifting the lid. Having been hastily bathed by the hospital staff, Carter was now sitting on the edge of his bed and adamantly refusing to get into the wheelchair to go to the radiology department. The office nurse, who had known Carter for some time, stepped past me and the two aides who were warily considering his new intransigence. Putting her hand on his arm, she patiently explained to him why it was important to have his x-ray done. Carter nodded reluctantly and asked her if she'd help him put his underpants on. "You won't be embarrassed, will you?" he asked shyly. She deftly slipped his shorts over his swollen legs and then stood closely by so that he could lean against her as she pulled the shorts all the way up.

Carter then sat down again firmly on the edge of the bed. "I need to wash my hands first," he declared. Acting as if she had all morning (while I furtively glanced at my watch and thought of patients waiting at the clinic), the office nurse filled the shallow basin with warm water and added a bar of soap. She moved over to Carter and gently washed his hands while he gazed at her solemnly. He seemed to bask in her attention as she assisted his languid ablutions. She then carefully dried his hands before expertly assisting his wobbly effort to stand, pivot, and drop into the wheelchair. The aides and I were so mesmerized by the solemnity and innocence of this communion, that none of us even moved forward to assist the transfer.

On that day, she was just being a nurse, I suppose. She is always a nurse when summoned to care. Seemingly without forethought, she intervened to do what was needed to comfort Carter. Watching her, it seemed clear to me that the most noble things we caregivers do frequently are the types of humble, compassionate actions I was observing.

As I reflect back upon this episode, I remain subdued by its lessons. Whether caring for the patient as a nurse, a therapist, or a physician, some things should be at the heart of what we do. A gentle touch, undistracted presence, and soothing communication all can have enduring value.

Clearly the physician has a complex role that includes orchestrating diagnosis and therapy. But for the patient, there are times when such cerebral talents are simply not enough. On such occasions, the patient is not asking for more than we can give, but for what we may not think to offer. By attending to particulars, by recalling stellar examples of caregiving previously encountered, the physician can excel at the gentle art of comforting. This should be our mandate whether we have the concomitant ability to offer curative treatment or not. It's the reason for being there.

Jerome W. Freeman, MD
Editor

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The AMA Foundation raffled a Gold 2000 Chevy Suburban at its Golden Anniversary celebration June 8, 2000, in Rapid City, SD.

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119th Annual Meeting
June 8-10, 2000**

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MINUTES

EXECUTIVE COMMISSION

5:00 pm Salon E
Wednesday Rushmore Plaza Holiday Inn
June 7, 2000 Rapid City, South Dakota

The meeting was called to order by K. Gene Koob, MD. Those present included Drs. Koob, Stephen Gehring, Richard Holm, Herb Saloum, James Engelbrecht, Mary Carpenter, Robert Raszkowski, Charles Hart and Rodney Parry, and staff, Paul Jensen and Jan Anderson.

Mr. Jensen reviewed the CPA audit prepared by McGladrey and Pullen for the 1999-2000 fiscal year. Dr. Koob moved to approve the audit as submitted. The motion was seconded and carried.

There being no further business, the meeting adjourned at 5:15 pm.

MINUTES

FIRST COUNCIL MEETING

3:00 pm Salon E
Wednesday Rushmore Plaza Holiday Inn

June 7, 2000

Rapid City, South Dakota

The meeting was called to order by Dr. Raszkowski, Chairman. Those present for roll call were Drs. K. Gene Koob, Stephen Gehring, Richard Holm, James Engelbrecht, Mary Carpenter, Robert Raszkowski, Charles Hart, Rodney Parry, Herb Saloum, Paul Eckrich, James Hovland, James Larson, Steven Feeney, Tom Johnson, Pierre Kamguia, J. Michael McMillin, Guy Tam, C. Roger Stoltz, David Bean, Jem Hof, H. Lee Ahrlin, Victoria Herr, H. Thomas Hermann, Cynthia Weaver, Douglas Traub, Dale Gunderson, Nancy Phipps, Richard Kafka, James Collins, Alan Bloom, Leonard Kolodychuk, Ken Aspaas, Joy Falkenburg and staff, Paul Jensen, Dean Krogman, Charvin Dixon and Jan Anderson.

Dr. Hermann moved to approve the minutes of the previous meeting as printed and distributed. The motion was seconded and carried.

Dr. Parry encouraged the Council members to sponsor a medical student for State and AMA Membership.

Dr. Carpenter presented a report from the Medicaid Task Force. She stated that Dave Christensen has resigned, and there is a new director for the Department of Social Services, Medicaid Division. Also, CHIP is being expanded to 200% of poverty level, and it is expected about 2,400 children will be added to this program. Dr. Carpenter stated the Department is moving towards implementation of a formulary. Dr. Holm moved the Council encourage the Department of Social Services, Medicaid Division, to adopt a formulary that is influenced by physicians of the State Medical Association. The motion was seconded. Dr. Carpenter moved to adopt a substitute motion that if the Department of Social Services, Medicaid Division, decides to implement a formulary, it be developed under the guidance and direction of the physicians of the South Dakota State Medical Association. The motion was seconded and carried. The Council accepted this report for information.

The Council reviewed a letter from an attorney concerning charges submitted by physician offices for copying medical records. They also reviewed the "Interprofessional Guidelines for Physicians and Attorneys" that was drafted by a joint committee of physicians and attorneys. After considerable discussion Dr. Hovland moved to table this issue. The motion was seconded and carried.

Paul Jensen and Charvin Dixon provided information to the Council on the Credential Verification Organization (CVO) proposal. The Council members agreed that the primary interest is to develop one application form that would be acceptable to all facilities, organizations, etc. Questions were raised regarding the participation of facilities, insurers, HMOs,

MINUTES

FIRST HOUSE OF DELEGATES MEETING

8:30 am Rushmore Hall A & B
Thursday Civic Center
June 8, 2000 Rapid City, South Dakota

The meeting was called to order by Charles Hart, MD, Speaker of the House. Those present for roll call were Drs. K. Gene Koob, Stephen Gehring, Richard Holm, Herb Saloum, Robert Raszkowski, James Engelbrecht, Mary Carpenter, Charles Hart, Rodney Parry, Paul Eckrich, James Hovland, Richard Rak, Scott Berry, Jeff Parker, Joe Chang, James Larson, Steven Feeney, Leonard Kolodychuk, Greg Larson, Tom Johnson, Pierre Kamguia, Oldrich Bubenik, Robert Rietz, Robert Hohm, Louis Karlen, John Berg, Karl Blessinger, John Sall, J. Michael McMillin, Daniel Kennelly, Guy Tam, C. Roger Stoltz, Julie Johnson, David Kapaska, Donald Knudson, C. F. Gutch, Vernon Stensland, W. O. Rossing, John Oliphant, David Bean, Jorge Johnson, William R. Rossing, James Reynolds, Jem Hof, Frank Messner, H. Lee Ahrlin, Victoria Herr, H. Thomas Hermann, Cynthia Weaver, Dale Gunderson, Wayne Anderson, Nancy Phipps, Richard Renka, Allen Nord, Rochelle Christensen, Carol Zielike, O. Myron Jerde, Richard Kafka, Tony Berg, James Collins, Alan Bloom, Dennis Crossley, Joy Falkenburg, Jay Kennedy and Collette Ducheneaux.

Dr. Berg moved to adopt the minutes of the previous meeting as they were printed and distributed. The motion was seconded and carried.

The following were appointed to the Nominating Committee by the Association president: Drs. James Reynolds, Chairman, James Hovland, Steven Feeney, Thomas Johnson, Ken Bartholomew, Robert Hohm, Carey Buhler, Jem Hof, H. Lee Ahrlin, Mary Carpenter, James Collins and Alan Bloom.

The following were appointed to the Reference Committees by the Speaker of the House:

Reference Committee #1 — Credentials, Resolutions and Memorials and Reports of Officers and Councilors: Drs. William O. Rossing, Chairman, Pierre Kamguia, Robert Raszkowski, Brian Tjarks, Guy Tam, James Wiggs, H. Tom Hermann, Richard Kafka, Richard Rak, Joe Chang, Karl Blessinger, Vernon Stensland, David Bean, Michael McHale, Nancy Phipps, Gerald Butz, Laurie Weisensee, Rochelle Christensen, Dwight King, Robert Rietz, Quinton Thomas, Greg Larson, Donald Knudson and J. P. Kennedy.

Reference Committee #2 — Reports of Commissions on External Relations, Medical Education, and Medical Practice: Drs. Leonard Kolodychuk, Chairman, James Larson, Louis Karlen, Loren Tschetter, Angelina Trujillo, Michael Elston, Dale Gunderson, Kevin Bjordahl, Daniel Kennelly, Jeff Parker, Colleen Breske,

David Kapaska, Carol Zielike, Donald Humphreys, Jeanne Berry, John Vidoloff, John Barlow, John Berg, Ronald Wagner, C. F. Gutch, William R. Rossing and Wesley Sufficool.

Reference Committee #3 — Reports of Special Committees and Miscellaneous Business: Drs. Wayne Anderson, Chairman, Paul Eckrich, Dale Vizcarra, John Sall, C. Roger Stoltz, Victoria Herr, Cynthia Weaver, Donald Lucek, Adam Stys, Julie Johnson, Dennis Crossley, Collette Ducheneaux, John Oliphant, Jorge Johnson, Richard Renka, Allen Nord, Kevin Weiland, Kristen Holland, Frank Messner, Vassilia Young, Scott Berry, Oldrich Bubenik and William Fuller.

Dr. Hart announced that student sponsor forms were placed on all tables, and all physicians were encouraged to sign up to sponsor a new student member for the SDSMA and AMA. Also, he reminded all who were attending the AMA Foundation event that evening to take their gold certificates for prizes.

Dr. Tam moved to dispense with the reading of the reports of the officers and councilors inasmuch as they have been printed and to refer them to the appropriate reference committee. The motion was seconded and carried.

Dr. Hart called for introduction of resolutions from the Council that were not included in the handbook. There were none. He called for the introduction of resolutions from the district medical societies, the student section and the resident section that were not published in the handbook, and again there were none. He called for introduction of resolutions from individuals. Dr. David Bean introduced a resolution.

RESOLUTION

TO: House of Delegates

FROM: David Bean, MD

SUBJECT: Medical Insurance Parity

BE IT RESOLVED, that the South Dakota State Medical Association join with the South Dakota Psychiatric Association to support and promote mental health and substance abuse medical insurance parity laws in the state of South Dakota and South Dakota Legislature.

Dr. Hart referred this to Reference Committee #1.

Dr. Mary Carpenter introduced a resolution on behalf of Dr. James MacDougall.

RESOLUTION

TO: House of Delegates

FROM: James MacDougall, MD

SUBJECT: Request to The Litigation Center

WHEREAS, hospitals are an important and integral part of the health care received by the citizens of this state, and

WHEREAS, the medical staff of hospitals provide the necessary clinical and medical expertise to permit a hospital to effectively meet both routine and acute health care needs of communities of this state, and

WHEREAS, the relationship between the governing board of a hospital and its medical staff should recognize the unique individual responsibilities of each body toward the other, and

WHEREAS, the hospital governing board must recognize the co-equal status of the medical staff in staffing and credentialing decisions to include the principle that medical staff membership should be based solely upon an individual physician's professional qualifications alone,

BE IT RESOLVED, by the Council of the South Dakota State Medical Association that the American Medical Association, by and through The Litigation Center of the American Medical Association and the State Medical Societies, is hereby requested to investigate the factual and legal situation involved in the case of Mahan vs. Avera St. Luke's now pending before the South Dakota Supreme Court, to determine whether Avera St. Luke's has violated the antitrust laws of the United States, and if so, to prosecute or cause to be prosecuted appropriate legal proceedings to obtain redress for violations of the antitrust laws of the United States; and further, that the South Dakota State Medical Association cooperate fully to the extent necessary with The Litigation Center in preparing and prosecuting the litigation.

Dr. Hart referred this to Reference Committee #2.

Dr. Hart referred the Handbook reports on pages 1 – 18, including Resolution #1, to Reference Committee #1, Credentials, Resolutions and Memorials, and Reports of Officers and Councilors. He referred the Handbook reports on pages 19 – 25, including Resolution #2, to Reference Committee #2, Reports of Commissions on External Relations, Medical Education and Medical Practice. He referred the reports on pages 26 – 31, including Bylaw Amendments #1 and #2, to Reference Committee #3, Reports of Special Committees and Miscellaneous Business.

Dr. Hart introduced Dr. Scott Eccarius, Speaker Pro Tem for the South Dakota House of Representatives. Dr. Eccarius encouraged physicians to become involved politically through legislative contacts, contributions to individuals and to the SDMedPAC, so that physicians can win those legislative issues on behalf of their patients and the practice of medicine.

Dr. Hart introduced Dr. James Engelbrecht, AMA Delegate, and Dr. Mary Carpenter, AMA Alternate Delegate. They presented information about the AMA, what is available for physicians, i.e. CEJA (the Council on Ethical and Judicial Affairs) report, reports from the Council on Scientific Affairs and other research and

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reports that may be valuable to physicians. They presented a video that discussed the AMA's involvement in patient rights legislation and explained how physicians can access legislative and other information from the AMA.

Dr. Hart announced the various business, education and social events scheduled throughout the remainder of the annual meeting, and he encouraged all to visit the exhibits. There being no further business the meeting adjourned at 9:45 am.

MINUTES

SECOND HOUSE OF DELEGATES

9:00 am	Salons E, F, G & H
Saturday	Rushmore Plaza Holiday Inn
June 10, 2000	Rapid City, South Dakota

The meeting was called to order at 9:00 am, by Charles Hart, MD, Speaker of the House. Those present for roll call were Drs. K. Gene Koob, Stephen Gehring, Richard Holm, Herb Saloum, James Engelbrecht, Mary Carpenter, Robert Raszkowski, Charles Hart, James Hovland, James Larson, Steven Feeney, Pierre Kamguia, Robert Hohm, John Sall, J. Michael McMillin, C. Roger Stoltz, Jem Hof, James Wiggs, H. Lee Ahrlin, Victoria Herr, H. Thomas Hermann, Cynthia Weaver, Dale Gunderson, Richard Kafka, Tony Berg, James Collins, Kevin Bjordahl, Alan Bloom, Dennis Crossley, Joy Falkenburg, John Vidoloff, Joe Chang, Scott Berry, Jeff Parker, Leonard Kolodychuk, Adam Stys, Colleen Breske, Oldrich Bubenik, Karl Blessinger, David Kapaska, C.F. Gutch, Vernon Stensland, W.O. Rossing, John Oliphant, Jorge H. Johnson, William R. Rossing, James Reynolds, Nancy Phipps, Allen Nord, John Barlow, Vassilia Young, Rochelle Christensen, Carol Zielike and David Sandvik, residents Jay P. Kennedy and Collette Ducheneaux, and student representative Joleen Falkenburg. A quorum was present and the meeting was declared competent to proceed.

A motion was made to dispense with the reading of the minutes of the previous meeting inasmuch as they will be printed and distributed. The motion was seconded and carried.

Dr. Reynolds read the Report of the Nominating Committee.

REPORT OF THE NOMINATING COMMITTEE

The Nominating Committee submits the following recommendations for the consideration of the House of Delegates:

OFFICERS

President Elect	Richard Holm, MD
Vice President	Robert Raszkowski, MD
AMA Delegate	James Engelbrecht, MD
AMA Alternate Delegate	Mary Carpenter, MD
Speaker of the House	Charles Hart, MD

COUNCILORS

Brookings-Madison District #3	
(2 years)	Pierre Kamguia, MD
Huron District #5	
(1 year)	Louis Karlen, MD
Mitchell District #6	
(3 years)	Brian Tjarks, MD
Seventh District #7	
(3 years)	Guy Tam, MD
(3 years)	Walter Carlson, MD
(3 years)	Karla Murphy, MD
(3 years)	Paul Amundson, MD
Yankton District #8	
(3 years)	Jem Hof, MD
(2 years)	William Cohen, MD
(1 year)	James Wiggs, MD
Black Hills District #9	
(3 years)	Cynthia Weaver, MD
(3 years)	Michael Elston, MD
Rosebud District #10	
(3 years)	Richard Kafka, MD
Northwest District #11	
(3 years)	James Collins, MD
(2 years)	Ronald Wagner, MD
Whetstone Valley District #12	
(3 years)	Kevin Bjordahl, MD

ALTERNATE COUNCILORS

Mitchell District #6	
(3 years)	Raed Sulaiman, MD
Seventh District #7	
(3 years)	C. Roger Stoltz, MD
(3 years)	John Oliphant, MD
(3 years)	William Fuller, MD
(3 years)	K-Lynn Paul, MD
Yankton District #8	
(3 years)	John Sternquist, MD
(2 years)	Kevin Bray, MD
(1 year)	Lawrence Leon, MD
Black Hills District #9	
(3 years)	Jeanne Berry, MD
(3 years)	Wesley Sufficool, DO
Rosebud District #10	
(3 years)	R.G. Nemer, MD
Northwest District #11	
(2 years)	Joseph Kalister, DO
Whetstone Valley District #12	
(3 years)	Elizabeth Gravley, MD

ANNUAL MEETING SITE

2001 - Sioux Falls, SD	June 7-9, 2001
2002 - Rapid City, SD	June 6-8, 2002
2003 - Sioux Falls, SD	June 5-7, 2003

Respectfully submitted,
NOMINATING COMMITTEE
James Reynolds, MD, Chairman
James Hovland, MD
Steven Feeney, MD
Robert Hohm, MD
Jem Hof, MD
H. Lee Ahrlin, MD
Mary Carpenter, MD
James Collins, MD
Alan Bloom, MD

A motion was made to accept the Report of the Nominating Committee and elect the officers, councilors, and alternate councilors as submitted. The motion was seconded and carried.

Dr. Nancy Dickey, Immediate Past President of the AMA was introduced and spoke to the House of Delegates.

Dr. W.O. Rossing read the Report of the Reference Committee on Credentials, Resolutions and Memorials and Reports of Officers and Councilors.

REPORT OF THE REFERENCE COMMITTEE ON CREDENTIALS, RESOLUTIONS AND MEMORIALS AND REPORTS OF OFFICERS AND COUNCILORS

The following delegates, alternate delegates, officers and councilors of the South Dakota State Medical Association were present: Drs. K. Gene Koob, Richard Holm, Herb Saloum, Robert Raszowski, James Engelbrecht, Mary Carpenter, Stephen Gehring, Charles Hart, Rodney Parry, Paul Eckrich, James Hovland, John Vidoloff, Richard Rak, Scott Berry, Jeff Parker, Joe Chang, James Larson, Steven Feeney, Leonard Kolodychuk, Greg Larson, Tom Johnson, Pierre Kamguia, Oldrich Bubenik, Robert Rietz, Robert Hohm, Louis Karlen, John Berg, Karl Blessinger, John Sall, J. Michael McMillin, Daniel Kennelly, Guy Tam, C. Roger Stoltz, Julie Johnson, David Kapaska, Donald Knudson, C.F. Gutch, Vernon Stensland, W.O. Rossing, John Oliphant, David Bean, Jorge H. Johnson, William R. Rossing, James Reynolds, Jem Hof, Frank Messner, H. Lee Ahrlin, Victoria Herr, H. Thomas Hermann, Cynthia Weaver, Dale Gunderson, Wayne Anderson, Nancy Phipps, Richard Renka, Allen Nord, Rochelle Christensen, Carol Zielike, O. Myron Jerde, Richard Kafka, Tony Berg, James Collins, Alan Bloom, Dennis Crossley, Joy Falkenburg, Jay Kennedy, and Collette Ducheneaux.

A quorum was present for the meeting of the House of Delegates. Total registration for the convention is 176, including 108 physicians, 2 students, 5 guests, 61 Alliance members, and 56 sponsoring companies.

The Reference Committee reviewed the reports of the officers, councilors and district reports and the 2000-

2001 budget. The Committee noted that District One's report states that the economic credentialing issue has disappeared but in fact it is still in litigation. The Committee also requests that next year the budget report be formatted to allow comparison between the previous year and the proposed budget.

The Reference Committee reviewed Resolution #1 and recommends that the phrase, "composed of physician members of all disciplines", be omitted from line 1 and the amended resolution be adopted as follows:

RESOLUTION #1

TO: House of Delegates
South Dakota State Medical Association
FROM: Council
South Dakota State Medical Association
SUBJECT: Adoption of SDSMA Mission Statement
BE IT RESOLVED, that the SDSMA adopt the following mission statement:

"The South Dakota State Medical Association is devoted to promoting the art and science of medicine, to protecting and improving the health of the public and to providing leadership and advocacy in the field of quality health care."

The Reference Committee reviewed Resolution #3 proposed by Dr. David Bean and recommends that the House adopt the amended resolution as follows:

RESOLUTION #3

TO: House of Delegates
South Dakota State Medical Association
FROM: David Bean, MD
SUBJECT: Medical Insurance Parity

BE IT RESOLVED, the South Dakota State Medical Association join with the South Dakota Psychiatric Association to support and promote, through our lobbyists' efforts, mental health and substance abuse medical insurance parity laws in the state of South Dakota and South Dakota legislature.

The Reference Committee submits the following resolution for the consideration of the House of Delegates:

WHEREAS, numerous people have been involved in planning, arranging and ensuring the success of the 2000 annual meeting of the South Dakota State Medical Association,

BE IT RESOLVED, that the State Medical Association extend its appreciation and thanks to the Black Hills District Physicians and the Black Hills District, Huron District, and Aberdeen District Alliances for their endeavors, and

BE IT RESOLVED, that the State Medical Association extend its thanks to the management of the Rushmore Plaza Holiday Inn, the Civic Center, the Hart Ranch Golf Course, the Rapid City Trap Club, the Journey Museum and Arrowhead Country Club for the excellent facilities and staff, and

BE IT RESOLVED, that the State Medical Association extend its thanks to the Rapid City Journal, KEVN-TV, KOTA-TV and radio, KIMM radio, KKLS radio, KTOQ radio, for publicizing this event, and

BE IT RESOLVED, that the State Medical Association extend its thanks to DakotaCare for hosting the hospitality room, to The First National Bank in Sioux Falls and Dr. Thomas and Mollie O. Krafka for sponsoring and hosting the AMA Foundation event and to T.R.A.S.H. for entertaining at this event, to the USD School of Medicine for sponsoring the continental breakfast, to Eide Bailly, LLP, for sponsoring the coffee break, to the South Dakota Foundation for Medical Care for their educational grant for the presentation by Dr. Brent James, and to Wellmark Blue Cross and Blue Shield of South Dakota for their educational grant to help underwrite the presentation by Emily Friedman.

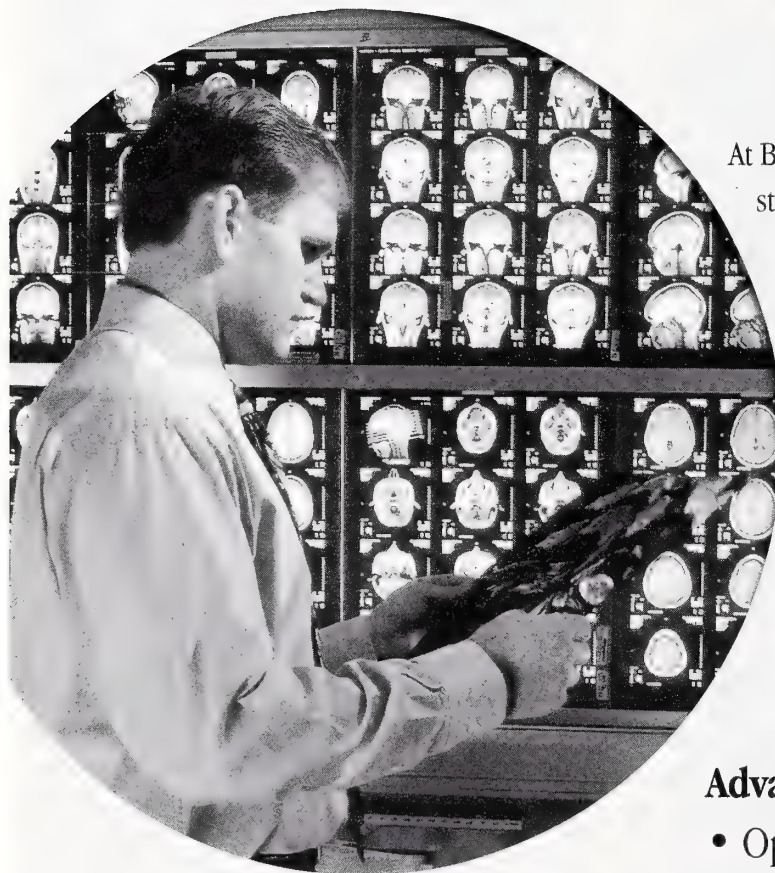
BE IT RESOLVED, that the State Medical Association extend special gratitude to the contributing companies for their support and participation, and

BE IT FURTHER RESOLVED, that \$100 be donated to the South Dakota Medical School Endowment Association in memory of each of the following physicians who died during the past year:

Lloyd Sweeney, MD; Sioux Falls
Bryson McHardy, MD; Aurora
LeRoy Askwig, MD; Pierre (AZ)
Isadore Eiringer, MD; Sioux Falls
Joseph Hamm, MD; Rapid City
Walter Baas, MD; Mitchell
James Schuft, MD; Sturgis
John O. Judge, MD; Mitchell (WA)
Raymond Boyce, MD; Rapid City
Arthur Lampert, Sr., MD; Rapid City
Francis Williams, MD; Rapid City (WY)
Werner Klar, MD; Sturgis
Verlynne Volin, MD; Sioux Falls
Thomas Billion, Jr., MD; Sioux Falls
M. Stuart Grove, MD; Sioux Falls

Respectfully submitted,
REFERENCE COMMITTEE ON
CREDENTIALS, RESOLUTIONS, AND
MEMORIALS AND REPORTS OF
OFFICERS AND COUNCILORS
William O. Rossing, MD, Chairman
Pierre Kamguia, MD
Robert Raskowski, MD
Guy Tam, MD
H. Tom Hermann, MD
Richard Kafka, MD
Karl Blessinger, MD
David Bean, MD
Vernon Stensland, MD
Donald Knudson, MD
Nancy Phipps, MD
Rochelle Christensen, MD

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Jay P. Kennedy, MD
Joy Falkenburg, MD

A motion was made to accept the Report of the Reference Committee on Credentials, Resolutions and Memorials and Reports of Officers and Councilors. The motion was seconded and carried.

Dr. Leonard Kolodochuk read the Report of the Reference Committee on Reports of the Commission on External Relations, Medical Education and Medical Practice.

**REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF THE COMMISSION ON
EXTERNAL RELATIONS AND THE
COMMISSION ON MEDICAL PRACTICE
AND THE COMMISSION
ON MEDICAL EDUCATION**

The meeting of Reference Committee #2 was called at 10:00 am, on June 8, 2000.

The reports from the commission chairs on External Relations, Medical Practice, and Medical Education were reviewed and a motion was made that the Reference Committee recommend to accept the reports as written.

Resolution #2 as printed in the Reference Committee Handbook was then reviewed by the Committee and the Committee recommended the Resolution be amended to read as follows:

RESOLUTION #2

SUBJECT: Antibiotic Use
WHEREAS, the rate of antibiotic drug resistant bacteria is increasing dramatically (s. pneumonia rate of resistance to penicillin by 300%, cefotaxime by 1000% '91-'96) and some pneumococci now is resistant to all oral antibiotics, and
WHEREAS, increasing antibiotic use is the likely cause of this increased resistance (48% increase in office-based antibiotic treatment for children since 1980), and
WHEREAS, antibiotic resistance puts patients at risk for adverse clinical outcomes (Studies have identified antibiotics as a significant risk factor for invasive disease with nonsusceptible pneumococci. One study shows 9% bacteria are resistant if there is no antibiotic use and 50% are resistant if there is prior antibiotic use.), and
WHEREAS, many of the antibiotics prescribed are for unnecessary indications (75% of all oral antibiotics are for URIs. Of these, 50% are for colds, rhinitis, and bronchitis that have no proven benefits from antibiotics.), and
WHEREAS, when a consistent policy for careful antibiotic use is developed, it causes the re-emergence of bacteria susceptible to antibiotics (e.g. in Finland and in other studies as well), therefore
BE IT RESOLVED, that SDSMA educate the citizens of South Dakota about the drug resistance problem and

the lack of benefits from use of antibiotics for colds, rhinitis and bronchitis, and

BE IT RESOLVED, that SDSMA encourage the South Dakota Foundation for Medical Care to study antibiotic utilization patterns and concentrate educational efforts appropriately.

This motion was carried with 8 for, 2 opposed. A minority report by those opposed was encouraged.

The next item of discussion of the Reference Committee was a Resolution brought before the Council, prior to this Reference Committee meeting, regarding a request to The Litigation Center as follows:

RESOLUTION

SUBJECT: Request to Litigation Center
WHEREAS, hospitals are an important and integral part of the health care received by the citizens of this state; and
WHEREAS, the medical staff of hospitals provide the necessary clinical and medical expertise to permit a hospital to effectively meet both routine and acute health care needs of communities of this state; and
WHEREAS, the relationship between the governing board of a hospital and its medical staff should recognize the unique individual responsibilities of each body toward the other; and
WHEREAS, the hospital governing board must recognize the co-equal status of the medical staff in staffing and credentialing decisions to include the principle that medical staff membership should be based solely upon an individual physician's professional qualifications alone;
BE IT RESOLVED, by the Council of the South Dakota State Medical Association that the American Medical Association, by and through The Litigation Center of the American Medical Association and the State Medical Societies, is hereby requested to investigate the factual and legal situation involved in the case of Mahan vs. Avera St. Luke's now pending before the South Dakota Supreme Court to determine whether Avera St. Luke's has violated the antitrust laws of the United States, and, if so, to prosecute or cause to be prosecuted appropriate legal proceedings to obtain redress for violations of the antitrust laws of the United States; and further, that the South Dakota State Medical Association cooperate fully to the extent necessary with The Litigation Center in preparing and prosecuting the litigation.

Dr. Jim MacDougall, who introduced the Resolution, presented information to the committee and this was followed by considerable discussion. Dr. MacDougall's main points were that the principles involved with this issue were considerable and that the South Dakota State Medical Association should support a patient's right to choose their physician and that the physician should have the right to medical staff membership based on their qualifications rather than on economic factors. He

also made the point that the AMA would only review this situation on the basis of a recommendation from the SDSMA, and that the Litigation Center responds to requests from state medical associations/societies rather than individual physicians.

Considerable discussion ensued involving both members of the Reference Committee and other members of the SDSMA. This included the Council member from District 1, noting that the Resolution was discussed at the Council meeting on June 7th and the Council rejected this Resolution. It was also noted that District 1 voted unanimously at a recent District meeting not to have the state association become involved with the situation in their District. The point was made that the State Medical Association should respect the wishes of the majority of physicians in District 1 regarding this issue.

It was also discussed that the SDSMA lacked information regarding the appropriateness, or even the feasibility, of being involved in antitrust litigation. The question was raised whether or not the state association would have control over the litigation if they asked the Litigation Center to look into it, or if passage of the Resolution would allow the Litigation Center to “take over.” Point of Order was made that this Reference Committee would only be taking testimony and reporting on this to the House and that this would still be debated at the House level, and that the Reference Committee was only making a recommendation regarding the Resolution. As well, it was requested the SDSMA policy on economic credentialing be included in this report and that copies be available to House of Delegates members. There continued to be discussion and during this discussion a motion was put forward not to accept the Resolution as written, but to recommend that the SDSMA continue to support the principles and the current SDSMA/AMA policy against economic credentialing. After further discussion, this motion was voted upon with 6 in favor and 3 opposed.

There being no further business for Reference Committee #2, the meeting was adjourned.

Respectfully submitted,

Leonard Kolodychuk, MD, Chairman

James Larson, MD

Daniel Kennelly, MD

Dale Gunderson, MD

Kevin Bjordahl, MD

Jeffrey Parker, MD

Colleen Breske, MD

William R. Rossing, MD

David Kapaska, DO

C.F. Gutch, MD

John Barlow, MD

Wesley Sufficool, DO

Carol Zielike, MD

From the June 1999 SDSMA House of Delegates the following Resolution was passed:

BE IT RESOLVED, the South Dakota State Medical Association House of Delegates affirm the AMA’s definition and policy on economic credentialing as follows:

- (1) Economic credentialing is defined as the use of economic criteria unrelated to quality of care or professional competency in determining an individual’s qualifications for initial or continuing hospital medical staff membership or privileges.
- (2) The AMA and SDSMA strongly oppose the practice of economic credentialing.

Following the reading of the Reference Committee Report, the House of Delegates reviewed the Minority Report submitted by Dr. Gutch in opposition to the Reference Committee recommendation with regard to Resolution #2.

MINORITY REPORT

The proposed changes in the original Resolution by the Third District Medical Society deletion/alteration of the first “BE IT RESOLVED” proposing a policy of “Careful Antibiotic Use” negate the original purpose of the resolution as submitted.

Current “best evidence medicine” fully supports the original proposal. The American College of Physicians and CDC have worked to promulgate such policy for many months.

It is strongly recommended that our specialists in Infectious Diseases be asked for appropriate action, if there is question.

Respectfully submitted,

C.F. Gutch, MD

Committee Member

A motion was made to accept the Minority Report as submitted. A motion was made to accept the original Resolution #2 and not accept the Reference Committee recommendation. The motion was seconded and passed with 1 opposing vote.

A motion was made to accept the Report of the Reference Committee on Reports of the Commission on External Relations, Medical Education and Medical Practice. The motion was seconded and carried.

The following Substitute Resolution was submitted:

RESOLUTION

TO: House of Delegates

FROM: James MacDougall, MD

SUBJECT: Request to Litigation Center

WHEREAS, hospitals are an important and integral part of the health care received by the citizens of this state; and

WHEREAS, the medical staff of hospitals provide the necessary clinical and medical expertise to permit a

hospital to effectively meet both routine and acute health care needs of communities of this state; and

WHEREAS, the relationship between the governing board of a hospital and its medical staff should recognize the unique individual responsibilities of each body toward the other; and

WHEREAS, the hospital governing board must recognize the co-equal status of the medical staff in staffing and credentialing decisions to include the principle that medical staff membership should be based solely upon an individual physician's professional qualifications alone;

BE IT RESOLVED, by the ~~Council~~ of the South Dakota State Medical Association that the American Medical Association, by and through The Litigation Center of the American Medical Association and the State Medical Societies, is hereby requested to investigate the factual and legal situation involved in the case of Mahan vs. Avera St. Luke's now pending before the South Dakota Supreme Court, and

BE IT RESOLVED, that the SDSMA develop draft legislation to preclude economic credentialing in the state.

A motion was made to accept the second BE IT RESOLVED paragraph of the Substitute Resolution. The motion was seconded and carried.

A motion was made to amend the first BE IT RESOLVED paragraph as follows:

BE IT RESOLVED, by the Council of the South Dakota State Medical Association that the American Medical Association, by and through The Litigation Center of the American Medical Association and the State Medical Societies, is hereby requested to investigate (((and report back))) the factual and legal situation involved in the case of Mahan vs. Avera St. Luke's now pending before the South Dakota Supreme Court, and

((())) = Addition

----- = Deletion

The motion was seconded and carried. A motion was made to accept the balance of the Substitute Resolution as amended. The motion was seconded and carried.

A motion was made to accept the balance of the report of the Reference Committee on Reports of the Commission on External Relations, Medical Education and Medical Practice. The motion was seconded and carried.

Dr. Cynthia Weaver read the Report of the Reference Committee on Reports of Special Committees and Miscellaneous Business.

THANK YOU!

THANK YOU!

THANK YOU!

50,000 THANK YOUs (and more) for your support of the AMA Foundation *Gold Rush* event in June in Rapid City!

Because of your generosity, over \$50,000 was raised to support the USD School of Medicine and its students!!!

... to ensure that the quality of physicians and the care they provide to the citizens of our state and nation - including you and your families - will remain high in the future!

THANK YOU!

TOM and MOLLIE O. KRAFKA

2000 Legislative Summary

We started the session tracking over 40 pieces of legislation. Because of the volume, the Association has to establish a position on each bill and then prioritize its efforts.

- HB 1053** Would give optometrists full prescription authority. The Governor vetoed the bill and we sustained the veto in the House. The bill failed. *SDSMA opposed HB 1053.*
- HB 1099** This bill would allow chiropractors in South Dakota to give high school athletic physicals. This bill was passed and took effect July 1, 2000. *SDSMA opposed HB 1099.*
- HB 1028** This bill clarified the dispensing privileges of Physician Assistants and Nurse Practitioners in South Dakota. This bill passed. *SDSMA supported HB 1028.*
- HB 1133** Would allow for payment of off-label drug use of cancer drugs. The SDSMA monitored the bill. It passed both the House and Senate and was signed by the Governor.
- HB 1177** This bill provides for disclosures of the midwife in a home birth situation. It failed in committee. *SDSMA opposed this bill.*
- HB 1243** This bill created a tobacco prevention program on trust. The intent is to develop programs to help people stop smoking with an emphasis on young people and programs for the prevention of them starting to smoke. This bill passed. *SDSMA supported this bill.*
- HB 1089** Would mandate coverage for prostate testing. This bill was defeated. The SDSMA has traditionally opposed mandates.
- HB 1095** This bill would allow for the health professionals to incorporate together. The SDSMA monitored this bill. This bill passed.
- SB 42** This bill mandates the immunization of preschool children before entering school with varicella vaccine. The bill passed.
- SB 83** Was the Automatic External Defibrillator bill that proposed immunity under the good samaritan law for people trained to use them. This bill passed.
- SB 31, SB 66, and HB 1317** These bills were seat belt bills that were defeated. The SDSMA traditionally supports legislation of this nature.

We can anticipate based on what is happening in other parts of the country that expanded scopes of practice in many areas will be back again. Optometrists, Chiropractors, Nurses, Podiatrists, Pharmacists, and Orthodontists all have legislation currently being presented around the country.

Just a reminder - take a legislator or candidate to lunch. Let them know that you wanted to meet them and would like to help out with healthcare issues. Taking the time does make a difference!

New Physicians

The following physicians recently began practicing medicine in South Dakota.

Marcia Jean Beshara, MD 1224 W. Center St. Rochester, MN 55902	Resident	Robin Magnani, MD 85 Riverland Estates Dakota Dunes, SD 57049	AN
Matt N. Bien, MD 2004 S. Cedar Ave. Marshfield, WI 54449	Resident	Edward Mailloux, MD Central Plains Clinic 1100 E. 21st St. Sioux Falls, SD 57105	PD
Larry Burris, DO Central Plains Clinic 1100 E. 21st St. Sioux Falls, SD 57105	IM	Teresa Marts, MD 802 Bruner Ave. Sioux City, IA 51104	Resident
Azra M. Durakovic, MD 2300 S. Dakota Ave. Sioux Falls, SD 57105	Resident	Kelly McCaul, MD Avera McKennan Hospital 800 E. 21st St. Sioux Falls, SD 57105	HEM
Kathryn Florio, DO Central Plains Clinic 1100 E. 21st St. Sioux Falls, SD 57105	N	Michael McConnell, MD Central Plains Clinic 1100 E. 21st St. Sioux Falls, SD 57105	D
Helen Frederickson, MD OB-GYN Associates 1010 Ninth St. Rapid City, SD 57701-3523	OB/GYN	Steven C. McGraw, MD 9172 N. Ingrid Pl. Tucson, AZ 85743	Resident
William Goumas, MD 201 Lloyd St., Ste. 202 Aberdeen, SD 57401	GS/ON	Timothy Metz, MD Anesthesiology Associates 1100 E. 26th St. Sioux Falls, SD 57105	AN
Robert E. Grady, MD Anesthesia Physicians, Ltd. 1201 S. Euclid Ave., Ste. 112 Sioux Falls, SD 57105-0484	AN	Thomas C. Ortmeier, MD Sioux Valley Hospital 1100 S. Euclid Ave./PO Box 5039 Sioux Falls, SD 57117-5039	Resident
John T. Hill, MD Rapid City Emergency Services PO Box 6000 Rapid City, SD 57702	EM	Edmund S. Petrilli OB/GYN & GYN Oncology, PC 1000 E. 21st St., #3000 Sioux Falls, SD 57105-1018	OB/GYN
Pierre Kamguia, MD 2311 Yorkshire Dr. Brookings, SD 57006	OPH	Stuart Rice, MD 2805 Fifth St. Rapid City, SD 57701	NS
Dwight King, MD Yankton Medical Clinic 1104 W. Eighth St./PO Box 706 Yankton, SD 57078-0706	N/P	William Rizk, MD Siouxland Surgery Center 600 Sioux Point Rd. Dakota Dunes, SD 57049-1305	GS
Arthur Lee, MD Rapid City Regional Hospital 353 Fairmont Blvd. Rapid City, SD 57701	TS	Herbert Rubin, MD Brookings Medical Clinic 400 22nd Ave. Brookings, SD 57006	GS
Thomas Lee, MD Mallard Pointe Surgical Ctr 1201 Mickelson Dr. Watertown, SD 57201	AN	John Schwarzenbach, MD 500 North Fifth Hot Springs, SD 57747	IM

Foundation for Medical Care

The August issue of the *South Dakota Journal of Medicine* has historically been the business issue for the various organizations involved in the South Dakota State Medical Association Annual Meeting in June.

The Foundation's Annual Meeting in Rapid City this year was highlighted by a good turn out for the Corporate Body meeting and the Annual Meeting of the Board of Directors. The minutes of the Corporate Body meeting are presented on page 328 of this publication.

The Foundation would like to thank those retiring members of the Board for their help and guidance in the past. They include Dr. Bruce Mannes, Dr. Muthugounder Venugopal, and Dr. Catherine Gerrish.

The Foundation welcomes new Board members Dr. Jem Hof, Dr. Robert Rietz, and Dr. Sarah Reiffenberger.

Elected officers for the ensuing year are Dr. J. Michael McMillin, President; Dr. Jem Hof, Vice President; Dr. Douglas Kimmel, Secretary; Dr. Darrell Plumage, Treasurer; and Dr. Robert Rietz, Member at Large of the Executive Committee.

We at the Foundation for Medical Care look forward to working with all of you during the coming year in our ongoing effort to improve the quality of care for Medicare beneficiaries in South Dakota.

Gerald E. Tracy, MD
Medical Director

**REPORT OF THE REFERENCE COMMITTEE
ON REPORTS OF SPECIAL COMMITTEES
AND MISCELLANEOUS BUSINESS**

The Reference Committee considered the reports of the Grievance Commission, the South Dakota Medical Political Action Committee, the Board of Directors of the South Dakota Medical School Endowment Association, the Physicians' HELP Committee, the Workers' Compensation Task Force, and the Medicaid Task Force. The Reference Committee recommends acceptance of these reports.

The Reference Committee reviewed Bylaw Amendment #1 and recommends the House not adopt this amendment. The vote was 9 for, 1 opposed.

The Reference Committee reviewed Bylaw Amendment #2 and recommends the House adopt this amendment. The vote was 8 for, 2 opposed.

Respectfully submitted,
REFERENCE COMMITTEE ON REPORTS
OF SPECIAL COMMITTEES AND
MISCELLANEOUS BUSINESS

Wayne Anderson, MD, Chairman
C. Roger Stoltz, MD
John Vidoloff, MD
Julie Johnson, MD
John Oliphant, MD
Victoria Herr, MD
Dan Crossley, MD
John Sall, MD
Richard Renka, MD
Cindy Weaver, MD

A motion was made to accept the Reference Committee recommendation to not adopt Bylaw Amendment #1. The motion was seconded and passed with one opposing vote.

A motion was made that Bylaw Amendment #2 be amended as follows:

BYLAW AMENDMENT #2

ARTICLE VIII

Council

Section 1. Composition

The Council shall consist of the Councilors, the President, the President Elect, the Vice President, the Immediate Past President, (Councilor at Large), the Speaker of the House of Delegates, the Secretary-Treasurer of the Association, the Delegate(s) and Alternate Delegate(s) to the American Medical Association, and one appointed representative of the student associate members provided each classification has a minimum of 50 percent of the eligible individuals as Association members of the South Dakota State Medical Association and one Councilor for every fifty (50) members or fraction thereof from the Resident

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Physician Section with 51 or more members and two Councilors for the Resident Physician Section with 50 members or less provided this section has a minimum of 50 percent of the eligible individuals as Association members of the South Dakota State Medical Association (((and one (((non-voting)))) representative member appointed by the South Dakota State Medical Association Alliance))). The appointments shall be made annually and the representatives so named shall be current members of the State Association (((or the Alliance))). A majority of its members shall constitute a quorum. The Council shall elect a Chairman of the Council at the close of the last general session of the meeting to serve for one year. The Speaker of the House of Delegates shall serve as the vice chairman of the Council.

((())) = amendment to Bylaw Amendment #2.

The motion was seconded and following discussion, Bylaw Amendment #2 as amended passed by a majority vote.

A motion was made to accept the remainder of the Report of the Reference Committee on Reports of Special Committees and Miscellaneous Business. The motion was seconded and carried.

Dr. Gehring was installed as president of the South Dakota State Medical Association and briefly addressed the House of Delegates. The presidential address was followed by introduction of the new officers.

PRESIDENTIAL OATH OF OFFICE

I SOLEMNLY SWEAR THAT I shall carry out the duties of the President of the South Dakota State Medical Association to the best of my ability. I shall strive constantly to maintain the ethics of the medical profession and to promote the public health and welfare. I shall dedicate myself and my office to improving health standards and to the task of bringing increasingly improved medical care to the people of South Dakota. I shall uphold the Constitution and Bylaws of the AMA and the South Dakota State Medical Association. I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans. I do solemnly swear that I will discharge the duties of this office to the best of my ability, so help me God.

There being no further business, the meeting adjourned at 11:15 am.

ANNUAL MEETING MINUTES SOUTH DAKOTA FOUNDATION FOR MEDICAL CARE

The 24th Annual Meeting of the South Dakota Foundation for Medical Care was held on Thursday, June 8, 2000, at 9:45 a.m. at the Rushmore Plaza Holiday Inn and Civic Center, Rapid City, South Dakota.

The meeting was called to order by President Dave R. Johnson, M.D. The roll call was taken with the following members being present: K. Gene Koob,

M.D.; Stephen Gehring, M.D.; Richard Holm, M.D.; Herb Saloum, M.D.; Robert Raszkowski, M.D.; James Engelbrecht, M.D.; Mary Carpenter, M.D.; Charles Hart, M.D.; Rodney Parry, M.D.; Paul Eckrich, M.D.; Joe Chang, M.D.; James Larson, M.D.; Steven Feeney, M.D.; Leonard Kolodychuk, M.D.; Tom Johnson, M.D.; Oldrich Bubenik, M.D.; Robert Rietz, M.D.; Robert Hohm, M.D.; Louis Karlen, M.D.; John Berg, M.D.; Karl Blessinger, M.D.; John Sall, M.D.; J. Michael McMillin, M.D.; Daniel Kennelly, M.D.; Guy Tam, M.D.; C. Roger Stoltz, M.D.; David Kapaska, D.O.; Donald Knudson, M.D.; Vernon Stensland, M.D.; W. O. Rossing, M.D.; David Bean, M.D.; Jorge Johnson, M.D.; William R. Rossing, M.D.; James Reynolds, M.D.; Jem Hof, M.D.; Frank Messner, M.D.; Victoria Herr, M.D.; H. Thomas Hermann, M.D.; Cynthia Weaver, M.D.; Dale Gunderson, M.D.; Wayne Anderson, M.D.; Richard Renka, M.D.; Allen Nord, M.D.; Carol Zielike, M.D.; O. Myron Jerde, M.D.; Richard Kafka, M.D.; Tony Berg, M.D.; James Collins, M.D.; and Alan Bloom, M.D.

The President declared a quorum present for the purpose of conducting business of the corporation.

The President called for consideration of the minutes of the last annual meeting. He referred the membership to the Foundation minutes in the printed manual furnished to each member. It was moved and seconded that the minutes are accepted as published and the reading thereof waived. Upon voice vote the same was approved unanimously.

Dr. Johnson reported that the following persons were nominated for vacant terms of three years on the Board of Directors: Douglas Kimmel, M.D.; Tony Berg, M.D.; Jem Hof, M.D.; Robert Rietz, M.D.; Sarah Reiffenberger, M.D.; Mrs. Patty Butler; and Mr. Mick Penticoff. There being no other nominations, the following persons were declared elected to serve on the Board of Directors: Douglas Kimmel, M.D.; Tony Berg, M.D.; Jem Hof, M.D.; Robert Rietz, M.D.; Sarah Reiffenberger, M.D.; Mrs. Patty Butler; and Mr. Mick Penticoff.

Dr. Johnson called for consideration of the financial report. He noted that the financial report was published and was furnished to each member of the body. Dr. Johnson inquired of the membership if there were any questions or corrections with respect to the financial report. There being no comments, the financial report was accepted as published.

The membership was referred to the written reports submitted by the President, Medical Director, and Principal Clinical Coordinator. Dr. Johnson asked if anyone had any questions on the operations of the Foundation. There being none, he noted that all reports referred to in the meeting would be filed with the records of the Foundation and would be available for review by

the membership.

Dr. Johnson expressed his thanks to the physicians of South Dakota for their time and support in the activities of the South Dakota Foundation for Medical Care.

Dr. Johnson asked for consideration of other business. There being none, the meeting was adjourned at 9:50 a.m.

REPORT OF THE PRESIDENT AND CHAIRMAN OF THE EXECUTIVE COMMISSION

Welcome to all of the South Dakota State Medical Association who are able to be in attendance at our year 2000 annual meeting in Rapid City. I hope this meeting proves to be fruitful and fun for all of you. Take time to renew old acquaintances and make new friends and finally, enjoy the beauty of South Dakota's own Black Hills.

This year has been an exciting year for me, particularly the visits to each of our South Dakota State Medical Association districts. The trips to these districts has given me the opportunity to become well acquainted with our new CEO, Paul Jensen. I feel that Paul was a superb choice to lead the executive offices of the Medical Association. He has a depth of experience, knowledge, and energy that will serve us well for many years to come.

In our travels throughout the state, it was a joy to be able to meet with the variety of physicians who serve the populous of South Dakota so very well. Although our practices, practice styles, and nature of our personalities may be somewhat different, we all seem to have very similar problems. Dealing with HCFA is a daily, constant battle for all of us; however, it is here that the AMA will hopefully be able to provide the most support. This issue alone is enough reason to be active in the AMA and actively recruit new members on a daily basis for the AMA. The legislative sessions will continue to produce challenges for us on an ongoing basis. The scope of practice issues will always be there. We can consider ourselves fortunate that, unlike the state of Georgia, we did not face six totally distinct groups who were actively pushing scope-of-practice issues. We have formulated some new plans for dealing with legislative issues. One of these is that we hope to be able to have an experienced member of the Medical Association present in Pierre at all times during legislative sessions. This would be an assigned time period so that we could schedule that time out of the office and not suddenly have to drop whatever is going on in our busy practices for quick trips to and from Pierre. Once again, yeomen work was performed by our active members who live in the area, including, but not limited to, Dr. Mary Carpenter and Dr. Steve

Schroeder. To adequately attack any of these issues, however, we must have very close working relationships with our state legislators. This will require that we become involved personally in their campaigns and in the issues that confront them prior to their arrival in Pierre. Therefore, during the summer, it would behoove all of us to formulate some type of plan for addressing these issues. I would ask all of you to offer your hand in friendship and thanks to Dean Krogman for his skills and leadership as our lobbyist in Pierre and his guidance of South Dakota MedPAC throughout the year. Also, please be willing to write out your check to MedPAC. We all need to do this every year, as these are never-ending issues.

The issue of economic credentialing is far from settled in the state of South Dakota. A white paper of agreement between the South Dakota State Medical Association and the hospital association, which is now the South Dakota Association of Healthcare Organizations, was formulated using a similar paper that was formulated in California and provided to us by Dr. Howard Lang. Dr. Lang addressed us last year at our state meeting and addressed a Seventh District Medical Society Meeting last fall in Sioux Falls. Unfortunately, when final crunch time arrived, the SDAHO refused to sign-off on this compromise agreement to which we had both invested a considerable amount of time and energy. My hope, however, is that we can do that this year. I think it would prove to be of benefit to the members of both organizations. Once again, I encourage all of you to be active in your hospitals. I encourage you to discuss these issues frequently with your administrators, and probably, much more importantly, with the board members of the hospitals who are not aware of the intricacies of the hospital, patient and physician interrelationships. Finally, you should note that our issues in South Dakota did attract national attention and we were featured in the March 2000 *AM News* issue.

Nationally, the AMA, like most organizations of its size, has had to step back and take a look at itself. The issues of structure, governance and operations continue to be significantly important and it would appear that changes are going to be made, some of which are already in place. If you have paid attention, you will note that the finances of the AMA have required them to go into a restructuring of their budget which most of us feel probably should have occurred anyway. I think you will find that the news coming from the June 2000 AMA Meeting in Chicago will indicate that the leadership is aware of the unrest in the ranks of medicine.

As each year has brought about new changes in the politics, practice and nature of medicine, we have found new challenges which will continue to face us in the future. I have considered it a privilege to serve as the

President of the South Dakota State Medical Association this year and I have enjoyed the close working relationship with many of our members and staff personnel. Your new leader, Dr. Steve Gehring, is well qualified to lead us through the issues of the coming year and I encourage you to offer him your full support. I offer you all my sincere thanks and heartfelt wishes that the practice of medicine can be a joy in your future years.

Respectfully submitted,

K. Gene Koob, MD

President

Chairman, Executive Commission

The Reference Committee reviewed the Report of the President and Chairman of the Executive Commission and recommended it be accepted as submitted.

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SOUTH DAKOTA STATE MEDICAL ASSOCIATION
PROPOSED BUDGET
2000-2001

	<u>General</u>	<u>Journal</u>	<u>Building</u>	<u>Combined</u>
<u>Revenues</u>				
State Dues	\$ 496,000	\$	\$	\$ 496,000
Rents	35,000		249,500	249,500
Annual Meeting	12,000			35,000
Advertising	12,000	40,000		52,000
Commissions/Rebates	6,500			65,000
CME Fees	2,600			2,600
Lists, Labels, Brochures	13,500			13,500
Investment Earnings	18,500		100	18,600
Subscriptions		1,300		1,300
Other Miscellaneous	1,400	100		1,500
Total Revenues	\$ 585,500	\$ 41,400	\$ 249,600	\$ 876,500
<u>Expenses</u>				
Salaries/Deferred Comp	\$ 504,000	\$ 1,700	\$ 49,800	\$ 555,500
Employee Fringe Benefits	98,500			98,500
Depreciation	9,000		37,200	46,200
Operating Supplies	12,000	1,000	1,400	14,400
Repairs and Maintenance			15,000	15,000
Payroll Taxes	31,000	100	3,500	34,600
Annual Meeting	38,000			38,000
Contract Services	13,000	500	13,000	26,500
Interest			7,600	7,600
Legislative Expense	25,000			25,000
Property Taxes			26,000	26,000
Utilities			22,000	22,000
Postage	20,000	6,000		26,000
Printing & Reproduction	27,000	34,000		61,000
Staff Travel	28,000			28,000
Physician Travel	24,000			24,000
Telephone	11,000	50		11,050
Insurance	4,000		4,000	8,000
Legal	15,000			15,000
Audit	10,000			10,000
Meeting Expense	10,000			10,000
Public Relations	8,000			8,000
Alliance Expense	6,000			6,000
Vehicle Expense	9,100			9,100
Dues and Subscriptions	2,500			2,500
Income Taxes			7,500	7,500
Continuing Medical Ed.	2,500			2,500
Salary & Fringe Benefit				
Reimbursement	(294,000)			(294,000)
Administrative Expense				
Reimbursement	(8,200)			(8,200)
Other	8,000			8,000
Total Expenses	\$ 613,900	\$ 43,350	\$ 188,500	\$ 843,750

The Reference Committee reviewed the Budget and recommended it be accepted as submitted. The Reference Committee recommended that future budget reports be formatted to allow comparison between the previous year and the proposed budget.

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ACE Inhibitors: New Hope For Old Drugs?

Sonya R. Dvorak, PharmD, BCPS; Sioux Falls, SD

Angiotensin-converting-enzyme (ACE) inhibitors are a class of antihypertensive agents which can have a significant impact on patient outcomes and mortality when used in the treatment of other disease states. The benefits of ACE inhibitors in the treatment of left ventricular dysfunction, congestive heart failure, renal disease, and myocardial infarction, for example, are well established. New data may also define a niche for the routine use of ACE inhibitors in the prevention of cardiovascular events and onset of type 2 diabetes mellitus.

BACKGROUND

As antihypertensive agents, ACE inhibitors have a relatively defined role. Beta-blockers and diuretics should be used as first line antihypertensive therapy when comorbid conditions do not dictate otherwise. Using beta-blockers and diuretics to manage blood pressure has been shown to result in a definitive reduction in cardiovascular events and mortality related to hypertension.¹ There is some highly controversial data that suggests treating hypertension with ACE inhibitors results in similar outcomes when compared to beta blockers or diuretics.² ACE inhibitors are recommended for management of hypertension in patients with CHF (congestive heart failure), left ventricular dysfunction, or diabetes with proteinuria.¹

ACE inhibitors are the cornerstone of drug therapy for treatment of CHF and prevention of left ventricular dysfunction due to acute myocardial infarction. ACE inhibition decreases the incidence of CHF and death following myocardial infarction. CHF is an absolute indication for receiving an ACE inhibitor, yet an estimated 30% to 60% of patients with CHF do not receive ACE inhibitor therapy.³ Recent data indicates that in patients with advanced heart failure, 25% still do not receive ACE inhibitors, and of those who do, only 62% receive adequate doses.⁴ ACE inhibition is essential in CHF to prevent progression of heart failure and prolong life.

Treatment of nephropathy, particularly in patients with diabetes, is another important application for ACE inhibition. ACE inhibitors can decrease the risk of dialysis, renal transplantation and death associated with diabetic nephropathy by up to 50%.⁵ Additionally, ACE

inhibition is useful in preventing diabetic nephropathy. Therefore, ACE inhibitors are a first line therapy for treating and preventing renal disease.

EMERGING APPLICATIONS

Recently, the Heart Outcomes Prevention Evaluation (HOPE) trial demonstrated that long-term use of ramipril (Altace®) reduces the occurrence of cardiovascular events in high risk patients who have no history of left ventricular dysfunction or CHF. The study population included men and women greater than 55 years of age who had a history of cardiovascular disease (coronary artery disease, stroke, peripheral vascular disease), or who had diabetes in addition to one other risk factor for cardiovascular disease (dyslipidemia, hypertension, microalbuminuria, or tobacco use). Treatment with ramipril resulted in a significant reduction in the risk of myocardial infarction, need for CABG or PTCA, worsening angina, cardiac arrest, CHF, complications of diabetes, stroke, and death. These benefits were independent of changes in blood pressure, and less than half of the study participants had a diagnosis of hypertension at enrollment. The HOPE data indicates that treating 1000 high risk patients with ramipril for four years will prevent 150 major vascular events.⁶

While it is probable that these cardioprotective effects are a class effect common to all ACE inhibitors, only ramipril has demonstrated this benefit in patients without CHF. The dose of ramipril used in the HOPE trial was 10 mg given once daily. Ramipril is not known to possess unique cardioprotective properties that differentiate it from other ACE inhibitors. For patients who are intolerant of ACE inhibitors, there is no data to imply that angiotensin-II receptor blockers will confer a similar benefit. In fact, evidence suggests that the cardioprotective effect of ACE inhibitors is due at least in part to inhibition of breakdown of bradykinin, whereas angiotensin-II receptor blockers do not affect bradykinin.⁷ Therefore, it is probable that any ACE inhibitor used in adequate doses will result in a decreased risk of cardiovascular events.

Previous trials have also shown a decrease in the risk of myocardial infarction, unstable angina, and need for CABG or PTCA in patients receiving long-term ACE

inhibitor therapy with enalapril or captopril.^{8,9} However, these studies had been limited to patients with left ventricular dysfunction with or without clinical heart failure. The HOPE trial offers the first evidence that ACE inhibition is beneficial for preventing cardiovascular events in patients who do not have another indication for taking an ACE inhibitor such as hypertension or CHF.

ACE inhibitors may someday also have a role in prevention of type 2 diabetes mellitus in high risk patients. An interesting observation from the Captopril Prevention Project and the HOPE trial is a significant decrease in the incidence of new cases of type 2 diabetes when patients were treated with ACE inhibitors.^{2,6} The mechanisms by which ACE inhibition may delay or prevent the onset of diabetes are not clear, but may include improvement in insulin sensitivity.

CONCLUSIONS

The potential applications for ACE inhibitors are expanding. The HOPE trial data makes a clear case for using ACE inhibitors long-term in high risk patients to prevent cardiovascular events and prolong life. Initial justification exists for their use in preventing type 2 diabetes. ACE inhibitors are important in the management of hypertension, CHF, and renal disease. ACE inhibitors may not be the equivalent of "an apple a day" yet, but the clinical importance of inhibiting the renin-angiotensin system appears to be increasing.

The new data supporting the use of ACE inhibitors in the treatment of cardiovascular disease is exciting; it appears that ACE inhibitors are an effective preventative measure in high risk patients. Before the focus changes toward applying this new data, however, perhaps we first need to utilize ACE inhibitors optimally in disease states such as congestive heart failure. We need to increase the use of ACE inhibitors in the populations where we know they impact morbidity and mortality, as well as considering them for new applications.

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Edited by Brian Kaatz, Pharm.D.



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AMA Physician Recognition Award

Congratulations to the physicians in South Dakota who have earned the AMA Physician Recognition Award in the month of May, 2000

May 2000

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Pierre, SD

Margaret R. Devick, MD

Canton, SD

John R. Fox, MD

Rapid City, SD

** Member of the South Dakota State Medical Association*

REPORT OF THE PRESIDENT ELECT

One of the obligations of the President Elect is to attend the National Leadership Development Conference sponsored by the AMA. At this program, physicians are taught about the socioeconomic issues surrounding medicine. Courses available include sessions on fraud and abuse, grassroots campaigning in the political process, media interviews, health care contracting and a variety of other issues.

The other aspect of the meeting deals with the American Medical Association and its current projects. I am happy to report that the AMA has become a vigorous advocate for physicians, both in the national legislature and through the Advocacy Resource Center for state societies in the state legislatures. The AMA has supported physician lawsuits in a number of states, usually involving health care companies.

The AMA continues to guide physicians clinically with various projects such as the Education for Physicians on End-of-Life Care.

Scholarships are available for this meeting and I would urge members to avail themselves of this opportunity.

I would encourage physicians to stay in touch with the national organization.

Respectfully submitted,
Stephen H. Gehring, MD
President Elect

The Reference Committee reviewed the Report of the President-Elect and recommended it be accepted as submitted.

REPORT OF THE VICE PRESIDENT

What do you want/expect your Medical Association to do? At the April meeting, your councilors listed and prioritized areas of concern/interest/action in redefining its mission statement. Much of the result of their work is listed below in approximate order:

1. Strengthen federal and state political activity.

2. Improve relations between physician and their patients/the public.
3. Increase member involvement and service to members.
4. Educate physicians on how to incorporate the internet into their practices.
5. Promote student/resident/young physician involvement.
6. Promote patient/public education (especially in preventive health care).
7. Facilitate the study of ethical issues.
8. Enhance cooperation between specialty groups and between health care organizations.
9. Be a strong advocate for the patient, for access to health care insurance, for access to health care in rural South Dakota.
10. Support outcome based research/quality improvement and to address alternative medicine in this light.
11. Be an advocate for the physicians of South Dakota, especially in coding and third party payer relations.
12. Oppose economic credentialing.

The SDSMA needs your input and support to carry out these or other goals. Please give your input. Talk to your councilors or officers or our administrative staff.

Respectfully submitted,
Richard P. Holm, MD
Vice President

The Reference Committee reviewed the Report of the Vice President and recommended it be accepted as submitted.

REPORT OF THE SECRETARY/TREASURER

I am pleased to report that the State Medical Association continues to have a high percentage of physicians in South Dakota as members. There are 1,490 licensed MD's/DO's in South Dakota of which 1,375 are either active or honorary members of the Association. This amounts to 92% being SDSMA members. Unfortunately, of that number, only 697 or

51% are AMA members and this is an area that we could improve upon. It should be noted that the AMA membership increased from 49% in 1998 to 51% this past year. There are 104 residents in training who are SDSMA members and of these, 45 or 43% are also AMA members. We have 200 medical students who are SDSMA members and all are AMA members.

The State Medical Association continues to need more active participation by its membership. As we continue to battle to maintain our scope of practice, especially in the legislature, it is becoming increasingly obvious that we need to have more membership involvement in forwarding our causes. If this does not happen, we will continue to see our scope of practice infringed upon by other practitioners whose organizations are making the effort to promote their ideas to the legislature.

The financial balance of the State Medical Association continues to be excellent as defined by the Budget and Audit Committee Report and the budget, which is printed in another section of this handbook. Net assets of the Association did increase over the past year and no increase in dues has been slated by the Council.

Respectfully submitted,
H.A. Saloum, MD
Secretary-Treasurer

The Reference Committee reviewed the Report of the Secretary-Treasurer and recommended it be accepted as submitted.

REPORT OF THE CHAIRMAN OF THE COUNCIL

At the first of the Council's two meetings at the time of the annual meeting in June, the Council reviewed the status of the economic credentialing litigation in Aberdeen and forwarded a resolution to the House of Delegates on Economic Credentialing. Dr. Parry noted that the South Dakota High School Activities Association did not amend its by-laws to allow chiropractors to perform athletic physical examinations, and he thanked those who had contacted the local school board members in this regard. The work of the Workers' Compensation Task Force, a report by the Commission on Medical Practice, and a report of the Medicaid Task Force occupied much of the committee meeting. Mr. Jensen reviewed the status of the Association's early work with the AMA's AMAP program in an effort to simplify credentialing and recredentialing for South Dakota physicians.

At the second meeting of the Council, at the time of the annual meeting, Dr. Raszkowski was reelected the Chairman of the Council, and Dr. Herb Saloum was elected Secretary-Treasurer. It was suggested by Dr. Engelbrecht that the Grievance Commission be

expanded to also serve as an "ethics commission". This concept was approved. The Association was requested to obtain model by-laws from other states as a possible way to avert difficult interactions between hospital administration and the physician staff members.

In September the Commission met for its usual early fall meeting. The Workers' Compensation Task Force was dissolved as most of the current members had been appointed to the Governor's Task Force on Workers' Compensation and will be working basically in the same capacity. A major portion of the meeting was devoted to review the upcoming legislation. Dr. Aspaas reported that the rerecognition survey of the SDSMA by the ACCME was done using a televideo format and he felt that the review went well. He also noted the very successful scientific program at the time of the annual meeting. Mr. Steve Ellwing, Director AMA Division of Representation, presented information on the implementation of the AMA's National Negotiation Organization for Employed and Resident Physicians.

The November Council meeting was held in Pierre, as is traditional, and the major portion of the meeting was devoted to the upcoming legislative session. It was reported that the Aberdeen lawsuit on economic credentialing had been appealed to the State Supreme Court and that the AMA wished to join in amicus brief. A second probable economic credentialing situation at Rapid City Regional Hospital with respect to cardiac surgery was reviewed in depth. A by-law amendment to add a voting Alliance member to the Council was approved and this will go to the House of Delegates in June. It was noted that Dr. Howard Saylor is retiring from practice at the end of 1999 and will no longer serve as a Councilor from the Huron District. His long service to patients, the SDSMA, and the Council was noted, and he will be greatly missed at the Council meetings.

The final Council meeting of the year was held in April in Sioux Falls. Prior to the meeting, an exercise to set goals for the SDSMA was conducted. Then following the exercise, the goals were used to validate the proposed new mission statement, which the Executive Committee had developed at their January meeting. This mission statement will be presented to the House of Delegates. The Council discussed supporting members who have national positions with the AMA or who are running for leadership positions nationally with the AMA. The Council approved using a portion of reserves for campaign funding toward SDSMA-endorsed member candidates, and a line item in future budgets was suggested for this purpose as well. Legislative highlights (and low lights) of the 2000 South Dakota Legislative Session were reviewed. Intraprofessional guidelines for physicians and attorneys were approved, based on the recommendation of the

Commission on Medical Practice. Mr. Jensen reported on the status of the possible formation of a credentials verification organization, and this was referred to the Commission on Medical Practice for further consideration. The Council cast ballots based on nominations for the distinguished service, community service and media awards, which will be presented at the June annual meeting banquet.

During the past year the following members were elected to honorary life membership: Stanley Altman, MD; C.A. Groote, MD; Chung Tuan, MD; R.J. Zakahi, MD; A.J. Tieszen, MD; Jessie Easton, MD; James Hovland, MD; Winston Odland, MD; Barry Pitt-Hart, MD; Irvin Kaufman, MD; Howard Saylor, MD; Allen Dewald, MD; and G. Robert Bartron, MD.

This year marked a time of transition as Bob Johnson's leadership was replaced by that of Paul Jensen as the CEO of the SDSMA. The Council and the Association moved forward seamlessly thanks to the structured transition between Bob and Paul's leadership. Jan Anderson and Donna Toay continued to support the Council most effectively, and Councilors continued to work actively on behalf of the SDSMA. The Council remains a strong and viable voice for the membership between the time of the annual meetings and it has been my pleasure to serve as its chair for the last three years.

Respectfully submitted,
Robert R. Raszkowski, MD, PhD.
Chairman of the Council

The Reference Committee reviewed the Report of the Chairman of the Council and recommended it be accepted as submitted.

REPORT OF THE SPEAKER OF THE HOUSE

Y2K will provide many challenges to organized medicine in South Dakota. A tumultuous state legislative session, further federal budget reductions, a growth in uninsured patients and the prospect of significant federal health care legislation heralded by an election year provide an atmosphere which asks for leadership and direction. The House of Delegates provides the forum for our members and leaders to hear and implement the desires of our membership. Encourage your peers to participate in this process. Listen to their ideas and share them with your colleagues. This will provide the direction that will improve the practice of medicine at the local, state and national level.

I look forward to working with the House of Delegates as we face a new set of challenges.

Respectfully submitted,
Charles Hart, MD, MS
Speaker of the House

The Reference Committee reviewed the Report of the Speaker of the House and recommended it be accepted as submitted.

REPORT OF THE AMA DELEGATE

It has been my privilege to represent South Dakota physicians as your elected AMA Delegate, attending the Annual and Interim AMA meetings as well as being an active participant in the North Central Conference. Although this first two-year term has been a learning experience for me, we have been able to position the South Dakota delegation to continue an active role in organized medicine both regionally and nationally.

As always, this is a team effort and working with our Alternate Delegate, Dr. Mary Carpenter, as well as our entire delegation including the SDSMA President, SDSMA CEO and staff as well as the Medical Students, Residents and School of Medicine faculty, such as Dr. Robert Talley and Dr. Rodney Parry, has been a distinct pleasure. This delegation represents the physicians of South Dakota with competence and enthusiasm.

Two particular areas that I would like to highlight are the communication initiatives that we started in 1999 and our participation in the North Central Conference.

During the Annual and Interim Meetings of the AMA, I asked each member of our delegation to review the resolutions and reports carefully and bring to my attention any information that would seem particularly useful for the physicians of South Dakota in terms of scientific, ethical, political or practical interest. Several weeks after the meeting when the resolutions and reports are finalized, they are again reviewed by Dr. Carpenter and myself and a condensed version is sent to all South Dakota physicians in a special issue of the "Grab Bag". Some of these reports are forwarded in their entirety to our specialty society presidents who can then transmit them to their members as they see fit. Others are reproduced in summary form and sent out to all of the membership along with the appropriate information as to how to get the entire report. We would encourage you to read these reports and then give us feedback as to their usefulness.

The second area that I want to highlight is the North Central Conference. Our participation in this conference, which involves the delegations from North and South Dakota, Minnesota, Wisconsin, Iowa and Nebraska, is very important for maintaining a significant voice in the AMA. The North Central Conference has an annual meeting every November which is held in Minneapolis the first weekend in November. The meeting is from 1:00 - 5:00 pm on Saturday followed by an evening meal and entertainment and a Sunday breakfast meeting, adjourning by mid-morning. This is a very useful meeting not only to share information from our region that covers many of the local and national issues, but to enhance the collegiality among physicians throughout our region. I would encourage you to give serious thought to spending an enjoyable weekend with your colleagues in Minneapolis this

November.

Participating in the American Medical Association as your Delegate is an honor and privilege that I take very seriously. If there are issues that you feel need to be addressed by the AMA, I would encourage you to communicate them with me at any time.

Respectfully submitted,
James A. Engelbrecht, MD
AMA Delegate

The Reference Committee reviewed the Report of the AMA Delegate and recommended it be accepted as submitted.

REPORT OF THE AMA ALTERNATE DELEGATE

As your alternate delegate to the AMA, I attended both the annual and interim meetings of the House of Delegates and the National Leadership Development Conference. Much of the meetings were devoted to the issues of representing physicians in a collective bargaining unit, the PRN (Physicians for Responsible Negotiation) and the push for the passage of a meaningful patients bill of rights. There are new developments on both of these issues on an almost daily basis. Any information written in this report will almost surely be outdated by the time you read it. You can keep up with the most recent developments by checking the AMA website frequently at www.ama-assn.org.

During the First House of Delegates at our annual meeting, there will be a presentation on several new programs at the AMA, including information on the Advocacy Resource Center of the AMA.

I believe that the AMA needs to remain a viable organization for the good of medicine and I thank you for the opportunity to represent South Dakota. I hope that you will consider the importance of your membership to this organization representing medicine nationally.

Respectfully submitted,
Mary A. Carpenter, MD
AMA Alternate Delegate

The Reference Committee reviewed the Report of the AMA Alternate Delegate and recommended it be accepted as submitted.

REPORT OF THE COUNCILOR AT LARGE

Being able to serve on the Executive Committee of the South Dakota State Medical Association has been one of the most significant opportunities of my professional career. The reasons are many; however, several must be mentioned. The first is that I truly believe that organized medicine is the only assurance that physicians have to be able to direct their own future. To keep this avenue open, every physician must be involved. The second is the strength of leadership and depth of commitment by our wonderful staff on South

Minnesota Avenue. The members of the South Dakota State Medical Association Team respect physicians and are appreciative of our medical responsibilities. The last is the willingness of the Association officers, councilors, delegates and members to work for our best interests at both the state and national level. Surely the physicians of South Dakota are the most committed in the nation.

Like higher education, organized medicine must recognize the importance of diversity to better serve our constituency. We appreciate the development of new procedures, the discovery of new pharmaceuticals, and the advances of technology. We admire colleagues who demonstrate compassion; who identify disease by recognizing obscure signs and symptoms; and who excel in leadership. However, we must devote time and energy to address change. Do solo practitioners exist? Are there more hospital-based physicians in South Dakota than not? When will female physicians outnumber male physicians? Who will be the main providers of primary care? What should be our relationships with hospitals, payers, and medical schools? How should every individual have access to medical care? These are a few of the questions which deserve discussion as the answers may well change the future of our organization.

Thank you for your support. I have enjoyed the opportunity to work with all the physicians and alliance members throughout the state. Best wishes to each of you.

Respectfully submitted,
Rodney R. Parry, MD
Councilor at Large

The Reference Committee reviewed the Report of the Councilor At Large and recommended it be accepted as submitted.

REPORT OF THE CHIEF EXECUTIVE OFFICER

I would like to thank the physicians of South Dakota for the opportunity to assume the Chief Executive Officer position for the South Dakota State Medical Association. I have been employed by physician related corporations for all of my post-college career. I cannot think of a more dedicated group of individuals to work for than the physicians of South Dakota.

There are certain responsibilities and activities associated with this position that require modification from my previous duties. For assisting me in this new role, I would especially like to thank our state president, Dr. K. Gene Koob, and his wife, Karen, in addition to the support and assistance I have received from the members of the Executive Commission, and many of my old and new friends associated with the health care industry.

As usual, this year's legislative agenda included several bills relating to expanded scope of practice for non-physicians. These bills always generate considerable discussion and attention for non-physician groups. As a result of this attention, many bills have made their way through the legislative process in the past and expanded the scope of practice for non-physicians. These non-physician organizations spend a significant amount of time and money in their efforts to persuade legislators of their interest. It appears physicians will be faced with an ever-increasing number of non-physician organizations requesting expansion of their practice authority to include services traditionally performed by physicians. If we are going to challenge these organizations and have an impact in Pierre in upcoming legislative sessions, physicians must put together an organized and cohesive effort to work with local legislators.

On the national legislative front, we continue to monitor the patient bill of rights. As we watch this issue with significant interest in South Dakota, the main concern of organized medicine has been to fight for the right to advocate for quality health care for all South Dakota citizens. As we look around in our daily practices or associations, we need to reflect on the importance of our friends and continued working relationships to provide quality care to our patients.

With the ever-growing diversification in the business environment and the impact changes have on the way physicians practice medicine, physicians need to work together to accomplish the common goal of providing appropriate quality care without the intervention of larger corporate medical entities in South Dakota.

Our managed care company, DAKOTACARE, after having a difficult first half of 1999, has added significantly to its enrollment. It has taken many steps to manage claims expenses and we are very optimistic about the year 2000! I would refer you to the DAKOTACARE Annual Report for further details regarding DAKOTACARE operations.

In closing, I know I speak for all of the excellent and dedicated staff in our related organizations when I say that we will continue to work diligently to accomplish the goals established by the physicians of South Dakota.

Respectfully submitted,
L. Paul Jensen
Chief Executive Officer

The Reference Committee reviewed the Report of the Chief Executive Officer and recommended it be accepted as submitted.

REPORT OF THE FIRST DISTRICT COUNCILOR

It was a rather contentious year in District One this year. The object of the dispute revolved around what

was perceived to be a matter of internal affairs and community care issues with regard to credentialing; at least three quarters of the District One physicians held this view very strongly. The other point of view held by at most one quarter of the District One physicians, seemingly the majority of the Council and certainly (to the great consternation of the majority of District One members) by the Executive Committee was that this was simply a matter of economic credentialing without any association with quality of care.

The State Medical Association and the AMA supported with court briefs the views of the minority of the physicians of District One causing further disillusionment and discontent amongst the majority of the physicians of District One.

Fortunately the issue has disappeared. Unfortunately for many it will require time before the hurts and mistrusts will abate.

Respectfully submitted,
Paul Eckrich, MD
First District Councilor

The Reference Committee reviewed the Report of the First District Councilor, noting the report states that the economic credentialing issue has disappeared but in fact it is still in litigation.

REPORT OF THE SECOND DISTRICT COUNCILORS

The Watertown District Medical Society gathers for district meetings from September through May and has the summer off. This report will go from September of 1999 through April of 2000.

SEPTEMBER: The September meeting consisted of the semi-annual social meeting where the spouses were also invited. It was very well attended.

OCTOBER: The October meeting was a joint meeting of the Watertown and Brookings District Societies. It was held on October 5, 1999. No business was conducted. The purpose was to get to know each other better and everyone who attended had an enjoyable evening.

NOVEMBER: The usual business was conducted. The program consisted of the legislators meeting with physicians and discussing upcoming legislation.

DECEMBER: The meeting was held with the election of officers being completed. Nominations of Dr. Ramona Peshek as president and Dr. Malcolm Bull as the vice president were received. Delegates and councilors were also re-nominated.

JANUARY: The January meeting was held at Lakeshore Restaurant in Watertown. Dr. K. Gene Koob attended and his main program was on the scope of practice, HCFA regulations and economic credentialing.

FEBRUARY: The program featured Dr. Miroslaw

Mazurczak who presented a short, informative presentation on thrombophilia.

MARCH: The program was provided by Tim Hoheisel from the Codington County Historical Society.

APRIL: At the April meeting, we had a very good review by a lobbyist from the American Cancer Society. This meeting focused on the legislation this past year and dealt with why some of it passed and some failed. Also, we received legislative "do's and don'ts" and suggestions for future improvement.

Respectfully submitted,

Steven P. Feeney, MD

James C. Larson, MD

Second District Councilors

The Reference Committee reviewed the Report of the Second District Councilors and recommended it be accepted as submitted.

REPORT OF THE THIRD DISTRICT COUNCILOR

The Third District Medical Society met six times during 1999. The Third District meetings are held in coordination with Brookings Hospital and the CME is provided.

The programs presented include: 1) Questions for the Expert Cardiologist by David Nagelhout, MD, North Central Heart; 2) Spirituality in Medicine by Richard Holm, MD, Internal Medicine; 3) Common Allergy Problems by R. Maclean Smith, MD, Allergy/Immunology; 4) Dermatology Selected Topics by Sarah Sarbacker, MD, Dermatologist; 5) Medical Ethics by Nels Granholm, Ph.D.; 6) South Dakota State Medical Association Issues and Concerns by K. Gene Koob, MD, President, and L. Paul Jensen, CEO.

Attendance at these meetings ranged from 10 to 19 Third District members.

Respectfully submitted,

Thomas C. Johnson, MD

Third District Councilor

The Reference Committee reviewed the Report of the Third District Councilor and recommended it be accepted as submitted.

REPORT OF THE FOURTH DISTRICT COUNCILOR

The Fourth District Medical Society has once again elected Dr. Noel Chicoine as president; Dr. Bernard Linn as vice president; and Dr. Eldon Becker as secretary, as these offices have carried on into the new year. Dr. Dale Vizcarra and Dr. Ken Bartholomew are the current councilors. In the past year, Dr. Mike Holland and Dr. Joseph Villa have moved to Pierre where both have begun their practices as family practitioners.

The remodeling of St. Mary's Hospital has been completed and new OB and surgical units have been

utilized.

Respectfully submitted,

D.E. Vizcarra, MD

Fourth District Councilor

The Reference Committee reviewed the Report of the Fourth District Councilor and recommended it be accepted as submitted.

REPORT OF THE FIFTH DISTRICT COUNCILOR

The Huron District Medical Society met on several occasions over the past twelve months, with a visit from our president Dr. K. Gene Koob being well received. At present, one of our major concerns has been in dealing with third party managers and insurance companies, namely Wellmark, concerning dispensation regarding hospitalization. There is an impasse still present, but we are attempting to negotiate a resolution. The recent chiropractor issue, which passed both the Senate and the House, is of some concern. Our only response is that of providing for mass screening; via all physicians involved in health care of high-school aged students for free. This appears to be the only way of providing quality health care for our youth. We are anticipating a productive meeting in Rapid City for our annual convention with no other issues to be brought forward.

Respectfully submitted,

Robert Hohm, MD

Fifth District Councilor

The Reference Committee reviewed the Report of the Fifth District Councilor and recommended it be accepted as submitted.

REPORT OF THE SIXTH DISTRICT COUNCILORS

The Mitchell District Medical Society met six times since the last report was submitted. Current officers are: Paul Rasmussen, MD, president; James Gaede, MD, vice president; Raed Sulaiman, MD, secretary-treasurer. Currently there are 49 paid members and 11 honorary members in the district. Following is a listing of the district meetings and speakers:

May 20, 1999 - "Intensive Diabetes Management" by Richard J. Barth, MD, CDE

June 17, 1999 - "Clinical Evaluation and Assessment of Vascular Disease" by Leonard Gutnik, MD, FACP

Aug 19, 1999 - "Depression in the New Millennium" by Hari D. Kannan, MD

Sept 16, 1999 - "Obesity Treatments - New Hope for the Millennium" by Leonard Gutnik, MD, FACP

Jan 20, 2000 - "PV Use of Rt-PA" by David

Feb 17, 2000 - Warner, MD
SDSMA President's Visit - K.
Gene Koob, MD, and L. Paul
Jensen, CEO

Respectfully submitted,
Carey C. Buhler, MD
Brian Tjarks, MD
Sixth District Councilors

The Reference Committee reviewed the Report of the Sixth District Councilors and recommended it be accepted as submitted.

REPORT OF THE SEVENTH DISTRICT COUNCILOR

The Seventh District Medical Society, under the leadership of Dr. Walter Carlson, held four general membership meetings in 1999. The January meeting provided a legislative preview for the 1999 Legislative Session. The April meeting provided a discussion of the Sioux Falls Heart Hospital. In September, new members of the medical society and the alliance were welcomed to the fall kick-off meeting for an "Aloha at the Ho". In November, Kenneth H. Cooper, M.D., M.P.H., presented the topic, "Exercise, Nutrition and Supplementation, 21st Century Medicine".

In 1999, the Seventh District Medical Society established an annual scholarship with the Sioux Falls Area Foundation for a medical student from the Seventh district. Several members received honorary life membership status.

In 2000, the officers include: Dr. John Oliphant, President; Dr. Thomas Masterson, Vice President; Dr. Paul Amundson, Secretary; and Dr. Peter Andreone, Treasurer.

Respectfully submitted,
Karla K. Murphy, MD
Seventh District Councilor

The Reference Committee reviewed the Report of the Seventh District Councilor and recommended it be accepted as submitted.

REPORT OF THE EIGHTH DISTRICT COUNCILOR

The District Eight Medical Society members met once formally during the year of 1999-2000. The meeting was held in February 2000 with members being honored by Dr. K. Gene Koob's presidential visit.. Elections were held for councilors as well as officers. Dr. Koob led a wonderful discussion in regards to DakotaCare, HCFA, as well as other hot medical issues in the state of South Dakota.

Respectfully submitted,
Jem J. Hof, MD
Eighth District Councilor

The Reference Committee reviewed the Report of the

Eighth District Councilor and recommended it be accepted as submitted.

REPORT OF THE NINTH DISTRICT COUNCILOR

This year was a busy and challenging year for the Black Hills Medical Society. Dr. Wayne Anderson, representing the Northern Hills, served as President. The year started off with the annual Black Hills Playhouse summer meeting. Other events included the wine tasting at Jake's, the Christmas party in conjunction with the hospital and the Annual 1 and 5 year dinner for Black Hills Medical Society members. Rapid City Regional Hospital closed their medical staff to cardiovascular surgeons. They stated that this was an effort to keep enough cases for one surgeon to maintain a center of excellence. The medical staff saw this more as an issue of economic credentialing. After pressure from the medical staff, the board rescinded this decision. "Carewest", a physician led managed care product, was also created through the assistance of DakotaCare. Plans for this were unveiled this spring in Rapid City and, at the time of this summary, are underway.

Respectfully submitted,
Cindy Weaver, MD
Ninth District Councilor

The Reference Committee reviewed the Report of the Ninth District Councilor and recommended it be accepted as submitted.

REPORT OF THE TENTH DISTRICT COUNCILOR

The Rosebud District Medical Society held its annual meeting on January 11, 2000, in Dallas, SD. The South Dakota State Medical Association was represented by president K. Gene Koob, MD, and L. Paul Jensen, Chief Executive Officer. Dr. Rich Kafka and Dr. Tony Berg remain as councilors representing the Rosebud District Medical Society.

A discussion was held regarding the increasing number of employed physicians within the state of South Dakota. Legislative issues were discussed along with concerns regarding the lack of involvement of the Association members in the legislative process.

Respectfully submitted,
Tony L. Berg, MD
Tenth District Councilor

The Reference Committee reviewed the Report of the Tenth District Councilor and recommended it be accepted as submitted.

REPORT OF THE ELEVENTH DISTRICT COUNCILOR

The Northwest District met once during the past year, on January 10, in Mobridge. This was the official visit of the State Medical Association President, K. Gene

Koob, MD, and he was accompanied by L. Paul Jensen, the new CEO for the State Medical Association.

District officers for 1999-2000 are: President - Ben Henderson, DO; Vice President - James Collins, MD; Secretary-Treasurer - Leonard Linde, MD. Councilors are James Collins, MD, and Donald Lucek, MD, and Alternate Councilors are Leonard Linde, MD, and Ronald Wagner, MD. Currently there are 11 members in the Northwest District; however, Dr. Lucek has announced he will be leaving Mobridge in May 2000.

St. Alexis Health System has assumed management of the Mobridge Regional Hospital and the Mobridge Medical Clinic.

Respectfully submitted,
James Collins, MD
Eleventh District Councilor

The Reference Committee reviewed the Report of the Eleventh District Councilor and recommended it be accepted as submitted.

REPORT OF THE TWELFTH DISTRICT COUNCILOR

The Whetstone Valley District Medical Society held two meetings in the 1999-2000 year. Dr. Joseph Kass hosted a meeting at his home in late summer which was attended by district members as well as the SDMSA President, Dr. K. Gene Koob, and L. Paul Jensen, Chief Executive Officer of SDSMA. The spring meeting was held in Milbank. District officers were selected at the Milbank meeting.

Dr. Kevin Bjordahl and Dr. Alan Bloom will continue as councilors.

Respectfully submitted,
Alan R. Bloom, MD
Twelfth District Councilor

The Reference Committee reviewed the Report of the Twelfth District Councilor and recommended it be accepted as submitted.

RESOLUTION #1

TO: House of Delegates
South Dakota State Medical Association
FROM: Council
South Dakota State Medical Association
SUBJECT: Adoption of SDSMA Mission Statement
BE IT RESOLVED, that the SDSMA adopt the following mission statement:

“The South Dakota State Medical Association, composed of physician members of all disciplines, is devoted to promoting the art and science of medicine, to protecting and improving the health of the public and to providing leadership and advocacy in the field of quality health care.”

The Reference Committee reviewed Resolution #1 and recommended the phrase, “composed of physician members of all disciplines,” be omitted from line 1, and the resolution as amended be adopted.

RESOLUTION #3

TO: House of Delegates
South Dakota State Medical Association
FROM: David Bean, MD

SUBJECT: Medical Insurance Parity
BE IT RESOLVED, the South Dakota State Medical Association join with the South Dakota Psychiatric Association to support and promote mental health and substance abuse medical insurance parity laws in the State of South Dakota and South Dakota legislature.

The Reference Committee reviewed Resolution #3 and recommended the phrase, “through our lobbyists’ efforts,” be added to line 2, and the resolution as amended be adopted.

REPORT OF THE COMMISSION ON EXTERNAL RELATIONS

The Commission on External Relations met on September 14, 1999. Discussion was focused mainly on pending legislation. Dean Krogman was in attendance and led most of the discussion, offering specifics with regards to the legislation.

It was recommended that the Commission and Council approve economic credentialing and exclusive contracting pending further drafts which would refine the legislation. There is legislation requiring insurers to cover off-label uses of prescription drugs and this will be recommended for approval by the Commission. Regional licensing of nurses was also discussed and, for multiple reasons, it was recommended that the Association oppose this legislation. We were informed that the optometrists will be introducing new legislation to expand their scope of practice. Once again the Commission will recommend opposition to this legislation. Also, the Chiropractic Association will be bringing forth legislation to expand their scope of practice to include high school athletic physicals. The Commission will recommend vigorous opposition to any legislation with regards to expanded practice of chiropractors. We also reviewed a letter from the South Dakota Chapter, American College of Surgeons requesting support for a statewide 911 system. It will be recommended to the Association that we send a letter to the Governor encouraging these improvements and offer our support for such improvements.

Discussion was held concerning the support for the tobacco-free kids network and the clarification of license renewal dates. Several requests were obtained from specialty societies regarding information that the Commission on External Relations was handling. We

will make attempts to ensure this information is properly disseminated to these groups.

Final discussion was held concerning a public relations effort. It was felt by the Commission that we need to more aggressively compete with other professional organizations in the area of public relations as well as our relationship with the Legislature. We will ask the Council to consider this at their next meeting as many feel this is becoming a pertinent issue.

Respectfully submitted,
Gary L. Bruning, DO, Chairman
Commission on External Relations

The Reference Committee reviewed the Report of the Commission on External Relations and recommended it be accepted as submitted.

REPORT OF THE COMMISSION ON MEDICAL PRACTICE

There have been three meetings of the Commission on Medical Practice since the last report.

In a meeting on June 9, 1999, the Commission reviewed the proposal for a member directory and web page for the SDSMA and recommended to the Council that the SDSMA contract with HealthDirectory.com to publish the 1999-2000 SDSMA Member Directory with photos and web page development for individual positions, provided a contract allowed for SDSMA to have exclusive control over the website including advertising.

The "Code of Cooperation for Hospitals, Physicians, and Media" was discussed at length. Numerous changes to the code were proposed. The code was approved by the Commission and it was submitted to the South Dakota Association of HealthCare Organizations and the SDSMA Council for review and approval.

The Commission also reviewed information pertaining to the "Interprofessional Code for Physicians and Attorneys" and it was decided that the Commission should plan further meetings with the Bar Association regarding this document.

The Commission on Medical Practice met on September 16, 1999. At that time, members of the Commission met with representatives of the Professional Liaison Committee of the State Bar of South Dakota to review the "Interprofessional Code for Physicians and Attorneys". A draft document was to be distributed and discussed at the next meeting of the Commission on Medical Practice. The Commission also reviewed the final draft of the "Code of Cooperation for Hospitals, Physicians and Media" and made recommendations regarding minor wording revisions and recommended adoption of the "Code of Cooperation for Physicians and Media" to the Council. The Commission also discussed the Texas Organ Donor Program and recommended that no action be taken on

the program pending further contact and information to be supplied.

The next meeting was on November 10, 1999, and at that time, the Commission reviewed a draft proposal of the "Interprofessional Code for Physicians and Attorneys in South Dakota". Further changes were made to the code and a redraft of this was available for discussion at the April Council meeting as a document entitled, "Interprofessional Guidelines for Physicians and Attorneys in South Dakota".

Respectfully submitted,
Leonard Kolodychuk, MD, Chairman
Commission on Medical Practice

The Reference Committee reviewed the Report of the Commission on Medical Practice and recommended it be accepted as submitted.

REPORT OF THE COMMISSION ON MEDICAL EDUCATION

The Commission on Medical Education met in June and October of 1999. Continuing Medical Education activities for the year included approval of Prairie Lakes Hospital and Health Care Center as a new CME provider, review of Black Hills VA Health Care System's interim report, and review of annual reports from all of the other CME providers accredited by the SDSMA.

At its October meeting, the Commission discussed potential topics for the scientific program of the SDSMA state meeting. Based on the favorable response to the

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1999 scientific program, it was decided that a similar format should be followed, utilizing two speakers to cover topics of broad interest for the morning session. Emily Friedman, Health Policy and Ethics Analyst, has been selected as one of the speakers. After considerable discussion, it was decided that Brent James, MD, from Intermountain Health, should be contacted as a potential speaker. The Commission felt that these speakers could provide an excellent overview of the future of health care as we enter the 21st Century. Dr. James was contacted and has agreed to speak at the 2000 meeting.

In late 1999 the Accreditation Council for Continuing Medical Education reviewed the SDSMA as an accreditor of intrastate providers of CME. Preparation for this review by the staff of the SDSMA was extensive and extremely thorough. In March 2000, the SDSMA was "re-recognized" for a full four years with a progress report due in one year.

In the coming year, the Commission will be challenged to institute "System 98," a significant revision of the process previously used to review and accredit organizations providing CME. Plans are underway to initiate the education required at the June Commission meeting.

The Commission on Medical Education could not function without the expert assistance of the SDSMA staff. Once again, I must commend Jan Anderson and Donna Toay for their tireless work on our behalf. I would also like to recognize Dr. Bob Raszkowski for his help in the preparation for the ACCME review.

Respectfully submitted,
Paul Kenneth Aspaas, Jr., MD, Chairman
Commission on Medical Education

The Reference Committee reviewed the Report of the Commission on Medical Education and recommended it be accepted as submitted.

RESOLUTION #2

TO: House of Delegates
South Dakota State Medical Association
FROM: Third District Medical Society
SUBJECT: Antibiotic Use

WHEREAS, the rate of antibiotic drug resistant bacteria is increasing dramatically (s. pneumonia rate of resistance to penicillin by 300%, cefotaxime by 1000% '91-'96) and some pneumococci now is resistant to all oral antibiotics, and

WHEREAS, increasing antibiotic use is the likely cause of this increased resistance (48% increase in office-based antibiotic treatment for children since 1980), and

WHEREAS, antibiotic resistance puts patients at risk for adverse clinical outcomes (Studies have identified antibiotics as a significant risk factor for invasive disease with nonsusceptible pneumococci. One study shows 9% bacteria are resistant if there is no antibiotic use and 50% are resistant if there is prior antibiotic use.), and

WHEREAS, many of the antibiotics prescribed are for unnecessary indications (75% of all oral antibiotics are for URIs. Of these, 50% are for colds, rhinitis, and bronchitis that have no proven benefits from antibiotics.), and

WHEREAS, when a consistent policy for careful antibiotic use is developed, it causes the re-emergence of bacteria susceptible to antibiotics (e.g. in Finland and in other studies as well), therefore

BE IT RESOLVED, that South Dakota State Medical Association (SDSMA) encourage statewide implementation of a policy for "Careful Antibiotic Use" as outlined by the Center for Disease Control* (see attached), and

BE IT RESOLVED, that SDSMA educate the citizens of South Dakota about the drug resistance problem and the lack of benefits from use of antibiotics for colds, rhinitis and bronchitis, and

BE IT RESOLVED, that SDSMA encourage the South Dakota Foundation for Medical Care to study antibiotic utilization patterns and concentrate educational efforts appropriately, emphasizing the SDSMA's policy "Careful Antibiotic Use" for the improved health and safety of all South Dakotans.

The Reference Committee reviewed Resolution #2 and recommended the first Resolve be deleted and the phrase "emphasizing the SDSMA's policy 'Careful Antibiotic Use' for the improved health and safety of all South Dakotans" be deleted. The Committee recommended acceptance of the Resolution with these changes. The House adopted this resolution without the proposed amendments.

CDC

CAREFUL ANTIBIOTIC USE

Stemming the tide of antibiotic resistance: Recommendations by the CDC /AAP to promote judicious antibiotic use.

JUDICIOUS TREATMENT SUMMARY

DIAGNOSIS	CDC/AAP Principles of Judicious Antibiotic Use
Otitis Media	<ol style="list-style-type: none"> 1. Use only episodes of OM as acute otitis media (AOM) or otitis media with effusion (OME). Only treat proven AOM. 2. Antibiotics are indicated for treatment of AOM, however, diagnosis requires: <ul style="list-style-type: none"> — documented middle ear infection — and, signs or symptoms of acute local or systemic illness. 3. Don't prescribe antibiotics for initial treatment of OME: <ul style="list-style-type: none"> — treatment may be indicated if bilateral effusions persist for 3 months or more.
Rhinitis and Sinusitis	<p>Rhinitis</p> <ol style="list-style-type: none"> 1. Antibiotics should not be given for viral rhinosinusitis. 2. Mucopurulent rhinitis (thick, opaque, or discolored nasal discharge) frequently accompanies viral rhinosinusitis. It is not an indication for antibiotic treatment unless it persists without improvement for more than 10-14 days. <p>Sinusitis</p> <ol style="list-style-type: none"> 1. Diagnose as sinusitis only in the presence of: <ul style="list-style-type: none"> — prolonged nonspecific upper respiratory signs and symptoms (e.g. rhinorrhea and cough without improvement for >10-14 days), or — more severe upper respiratory tract signs and symptoms (e.g. fever >39 C, facial swelling, facial pain). 2. Initial antibiotic treatment of acute sinusitis should be with the most narrow-spectrum agent which is active against the likely pathogens.
Pharyngitis	<ol style="list-style-type: none"> 1. Diagnose as group A streptococcal pharyngitis using a laboratory test in conjunction with clinical and epidemiological findings. 2. Antibiotics should not be given to a child with pharyngitis in the absence of diagnosed group A streptococcal infection. 3. A penicillin remains the drug of choice for treating group A streptococcal pharyngitis.
Cough illness and Bronchitis	<ol style="list-style-type: none"> 1. Cough illness/bronchitis in children rarely warrants antibiotic treatment. 2. Antibiotic treatment for prolonged cough (>10 days) may occasionally be warranted: <ul style="list-style-type: none"> — Pertussis should be treated according to established recommendations. — Mycoplasma pneumoniae infection may cause pneumonia and prolonged cough (usually in children older than 5 years); a macrolide agent (for tetracycline in children 8 years or older) may be used for treatment. — Children with underlying chronic pulmonary disease (not including asthma) may occasionally benefit from antibiotic therapy for acute exacerbations.

When parents demand antibiotics

- Provide educational materials and share your treatment rules to explain when the risks of antibiotics outweigh the benefits.
- Build cooperation and trust:
 - ✓ don't dismiss the illness as "only a viral infection."
 - ✓ explicitly plan treatment of symptoms with parents.
 - ✓ give parents a realistic time course for resolution.
 - ✓ prescribe analgesics and decongestants, if appropriate.

Name: _____ Date: ____/____/____
 Diagnosis: ☐ Cold or Flu ☐ Middle ear fluid (Otitis Media with Effusion, OME)
☐ Cough ☐ Viral sore throat
☐ Other: _____

You have been diagnosed as having an illness caused by a virus.
Antibiotic treatment does not cure viral infections.
 If given when not needed, antibiotics can be harmful. The treatments prescribed below will help you feel better while your body's own defenses are defeating the virus.

General instructions:

- ☐ Increase fluids.
- ☐ Use cool mist vaporizer or saline nasal spray to relieve congestion.
- ☐ Soothe throat with ice chips, or sore throat spray; lozenges for older children and adults.

Specific medicines:

- ☐ Fever or aches: _____
- ☐ Congestion: _____
- ☐ Cough: _____
- ☐ Ear pain: _____
- ☐ _____: _____
- ☐ _____: _____

Use medicines as directed by your doctor or the package instructions. Stop the medication when the symptoms get better.

Follow up:

- ☐ If not improved in ____ days, if new symptoms occur, or if you have other concerns, please call or return to the office for a recheck.
- ☐ Other: _____

Signed: _____



Date: ____/____/____

Dear Child Care Professional:

I have carefully evaluated _____ and have diagnosed him/her as having.

- ☐ Cold or flu ☐ Middle ear fluid (Otitis Media with Effusion, OME)
- ☐ Cough ☐ Viral sore throat
- ☐ Other: _____

This illness is caused by a virus and antibiotic treatment will not cure a viral illness (antibiotics only are effective in treating bacterial infections). In fact, if antibiotics are given when they are not needed they may be harmful by increasing the child's risk of a resistant infection.

This child may return to day care when he/she does not have a fever. At that point most children can participate in activities, and do not require so much care that the health and safety of other children would be jeopardized. Excluding children with viral illness does not decrease the spread of infection to other children because viruses are likely to be spread even before symptoms of illness occur.

Sincerely yours,

P.S. Here are some expert reviews that support these recommendations:

Centers for Disease Control and Prevention. *The AHC's of Safe and Healthy Child Care: A Handbook for Child's Providers*. Atlanta, GA: Center for Disease Control and Prevention, Department of Health and Human Services, U. S. Public Health Service, 1996.

American Public Health Association and American Academy of Pediatrics. *Caring for Our Children: National Health and Safety Standards: Guidelines for Out-of-Home Child Care Programs*. Ann Arbor, MI: American Public Health Association and American Academy of Pediatrics, 1992.



REPORT OF THE GRIEVANCE COMMISSION

The Grievance Commission met in June 1999 and at that time, discussion was held regarding ethical concerns and how to disseminate educational information on the AMA/SDSMA Code of Ethics to the membership. This matter was referred to the Council for consideration and action.

During the past year, the Grievance Commission reviewed and finalized four complaints. None of these involved substandard medical care.

Respectfully submitted,
 James R. Reynolds, MD, Chairman
 Grievance Commission

The Reference Committee reviewed the Report of the Grievance Commission and recommended it be accepted as submitted.

REPORT OF THE SOUTH DAKOTA MEDICAL POLITICAL ACTION COMMITTEE

The Y2K legislative session is now behind us and it has provided us an insight into the future. There will be continued efforts by many groups to broaden their scope of practice, legislate medical care and to implement burdensome and restrictive regulations. Term limits will bring a significant turnover in both legislative houses resulting in a loss of many past legislators who have given us a sympathetic ear and supported our causes.

The role of S.D.Med.PAC will need to be enhanced if organized medicine in South Dakota is going to have an active voice in framing future health care policy. This can only happen if our membership grows in numbers, becomes more actively involved in grassroots activities, and is willing to financially assist old friends and new legislators.

The committee would like to thank the physicians and Alliance members who assisted us this past year and we look forward to working with them as we face future challenges.

Respectfully submitted,
 Charles Hart, MD, MS, Chairman
 South Dakota Medical Political Action Committee

The Reference Committee reviewed the Report of the South Dakota Medical Political Action Committee and recommended it be accepted as submitted.

REPORT OF THE BOARD OF DIRECTORS OF THE SOUTH DAKOTA MEDICAL SCHOOL ENDOWMENT ASSOCIATION

The board met in June 1999 with the following members present: Drs. Bruce Lushbough, James Larson, H. Thomas Hermann, Howard Saylor, Warren Jones and J. Michael McMillin; guests, Paul Bunger, Ph.D., Dr. Robert Talley and Dr. Rodney Parry; and staff, Bob Johnson, Paul Jensen and Terry Marks.

Mr. Jensen reviewed the 1998 financial report noting donations for the year totaled \$42,011.94.

Dr. Bunger, Dean of Medical Student Affairs at USD SM, provided information to the board showing average student debt was \$91,016. He stated this amount is above average for medical students and he and Dr. Talley discussed the school's program to counsel individuals regarding their debt and the impact this will have on them after graduation.

Dr. Talley thanked the board for the suggestions sent to the Board of Regents regarding tuition rates for USD SM students. The Board of Regents now calculates the tuition using averages from community medical schools with enrollment similar to that at USD SM rather than using averages from all medical schools in surrounding states. This makes the tuition more equitable for USD SM students.

The board recommended the following grants be awarded for 1999-2000:

Wulbers Grant two \$1,500 awards
Mickelson Grant two 1,250 awards
Mary Ann Saylor Grant two \$2,000 awards
T.H. Sattler Grant one \$1,500 award
Surgical Associates Grant one \$1,500 award
(Endowment Board's recommendation)

The board allocated \$100,000 for student loans for 1999-2000 and they asked Dr. Bunger to review the Board's loan policy and make any recommendations he feels would be appropriate.

Discussion was held regarding solicitations for the year. It was decided each board member would send a personal letter to physicians in assigned districts and a Christmas letter would be sent over the president's signature. In addition, a letter would be sent to each district medical society encouraging the district to donate money to the Endowment, either part of their dues money or other funds that might be available. Also, the board asked the State Medical Association president to encourage donations to the Endowment Association at the time he makes his official presidential visits to the district medical societies.

L. Paul Jensen was named as the registered agent for the South Dakota Medical School Endowment Association, and he and Jan Anderson were authorized to issue checks and conduct business on behalf of the Association effective September 1, 1999.

Officers elected for the coming year include: president - Bruce Lushbough, MD; vice president - Warren Jones, MD; secretary-treasurer - James Larson, MD.

Respectfully submitted,
Bruce Lushbough, MD, President
Board of Directors
South Dakota Med School Endowment Association

The Reference Committee reviewed the Report of the Board of Directors of the South Dakota Medical School Endowment Association and recommended it be accepted as submitted.

REPORT OF THE PHYSICIANS' HELP COMMITTEE

The Physicians' HELP Committee consists of a group of physicians concerned with colleagues who have impairments or may be impaired. Some of the members are also part of the Health Professionals Assistance Program. The committee meets at the annual meeting of the SDSMA when issues so warrant.

In the past year we have had a large increase in contacts concerning physicians. There have been a number of inquiries from practitioners about colleagues. We have assisted three physicians to obtain formal help for substance abuse problems. There are two others being considered for the program at the present time. We believe that this increase in contact may represent a greater familiarity and comfort with the program.

Respectfully submitted,
R.P. Renka, MD, Chairman
Physicians' HELP Committee

The Reference Committee reviewed the Report of the Physicians' HELP Committee and recommended it be accepted as submitted.

REPORT OF THE WORKERS' COMPENSATION TASK FORCE

In the 1999 legislative session, several changes were made to the workers' compensation laws at the suggestion of the Governor's Task Force. The task force also made several recommendations to the Department of Labor regarding rules changes. In order to carry out these suggestions, a work group was appointed. Several members of the Council's task force were asked to participate in this work group. Because this group's work will be ongoing and the SDSMA is well represented, the Council voted to disband the SDSMA's workers' compensation task force at this time. The group will reconvene at the request of the Council.

Respectfully submitted,
Mary Carpenter, MD, Chairman
Workers' Compensation Task Force

The Reference Committee reviewed the Report of the Worker's Compensation Task Force and recommended it be accepted as submitted.

REPORT OF THE MEDICAID TASK FORCE

The Medicaid Task Force of the SDSMA will have met twice in the last year. The first meeting was on June 9, 1999, and the second on May 18, 2000. The May meeting has not taken place at this writing, but a report on that meeting will be presented to the Council in June.

At the meeting in June 1999, it was reported that Medicaid reimbursement to physicians would increase by 2.6% for 2000 fiscal year. After review of the E&M code payment rates, it was decided to bring the fees up to 55% of average charge for each E&M code billed to Medicaid. It was also determined that no reimbursement would be decreased, but that any fees not for primary care would be capped at a 20% increase. This information was presented at the next Council meeting and following that, a letter was sent to all Medicaid providers to inform them of this change.

As of April 1, 1999, the eligibility level for the CHIP program was at 140% of the federal poverty level. At that time, the program covered 15% of South Dakota's children.

There was discussion at this meeting regarding the use of a relative value based reimbursement system for the Medicaid program. It was felt that this might offer some objectivity to the reimbursement system rather than having it being driven by charges. This will be the main topic for discussion at the May meeting.

I would like to thank Mr. Dave Christensen for his willingness to meet with the physicians of South Dakota and listen to their opinions.

Respectfully submitted,
Mary Carpenter, MD, Chairman
Medicaid Task Force

The Reference Committee reviewed the Report of the Medicaid Task Force and recommended it be accepted as submitted.

BYLAW AMENDMENT #1

TO: House of Delegates
South Dakota State Medical Association
FROM: Aberdeen District Medical Society
SUBJECT: Executive Commission

WHEREAS, we the members of District One Medical Society feel that the experience and opinions of the entire Council are essential in making policy and decisions of the South Dakota State Medical Association. We do not feel that important or urgent matters should exclude the direct input of the entire Council of the South Dakota State Medical Association, but rather Council involvement is even more critical in emergent or urgent situations than at any other time, and

WHEREAS, we live in a technologically friendly society with video conferencing in many of the communities of South Dakota. This enables the physicians and Councilors of the state to meet easily with very little notice. Emergent or urgent meetings can be held more expeditiously, safely, and conveniently utilizing this technology than requiring members to travel across the state. Video conferencing in urgent or

emergent situations will enable the entire Council to meet more quickly and safely than requiring the physical presence of the Executive Commission. This allows the input of the entire Council at a time when participation is most critical; therefore

BE IT RESOLVED, that Article X, Section 4, Paragraph a, be amended to read as follows:

a: Executive Commission - The Executive Commission shall consist of the President, President Elect, Vice-President, Secretary-Treasurer, Speaker of the House, Councilor at Large, Chairman of the Council, AMA Delegate(s), and AMA Alternate Delegate(s). Its duties shall be advisory in nature to the various officers and commissions when indicated, and it shall function when asked to do so by any one of them. The commission shall promptly, and in a most expeditious manner, review all applications for membership in the State Medical Association referred to the commission by a component district medical society of the Council. The commission may also establish criteria for the review of any member of the Council for approval. It shall have jurisdiction on matters of budget and audit, constitution and bylaws, obituary records and membership. It shall also have other functions as delegated from time to time by the House of Delegates or by the Council (((.))), ~~and shall have the power and authority to act on behalf of the Council between meetings of the Council in urgent situations.~~

((())) = addition

----- = deletion

The Reference Committee reviewed Bylaw Amendment #1 and recommended it not be accepted.

BYLAW AMENDMENT #2

TO: House of Delegates
South Dakota State Medical Association
FROM: Council
South Dakota State Medical Association
SUBJECT: Council Composition

ARTICLE VIII

Council

Section 1. Composition

The Council shall consist of the Councilors, the President, the President Elect, the Vice President, the immediate Past President, (Councilor at Large), the Speaker of the House of Delegates, the Secretary-Treasurer of the Association, the Delegate(s) and Alternate Delegate(s) to the American Medical Association, and one appointed representative of the student associate members provided each classification has a minimum of 50 percent of the eligible individuals as Association members of the South Dakota State Medical Association and one Councilor for every fifty (50) members or fraction thereof from the Resident

Physician Section with 51 or more members and two Councilors for the Resident Physician Section with 50 members or less provided this section has a minimum of 50 percent of the eligible individuals as Association members of the South Dakota State Medical Association (((and one representative member appointed by the South Dakota Medical Association Alliance))). The appointments shall be made annually and the representatives so named shall be current members of the State Association (((or the Alliance))). A majority of its members shall constitute a quorum. The Council shall elect a Chairman of the Council at the close of the last general session of the meeting to serve for one year. The Speaker of the House of Delegates shall serve as the vice chairman of the Council.

((()) = additions

The Reference Committee reviewed Bylaw Amendment #2 and recommended it be adopted as submitted.

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exhibit A:

Adhesive bandage, which plaintiff alleges defendant pulled rapidly from skin, violently tearing three hairs from plaintiff's arm, which resulted in severe shock, trauma, disfigurement, chronic debilitating pain and permanent psychological damage.

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You can be a “Sponsor” by contributing *\$100 or MORE* in a calendar year to the Endowment Association.

Your contributions may be tax deductible and the money is very much needed to make low interest (6%) loans to medical students who are attending the University of South Dakota School of Medicine.

In the last few years the number of loans granted by the Association has increased considerably and the total amount loaned annually is now \$100,000. This is a substantial amount, which means we need more contributions.

WON'T YOU PLEASE HELP?

Send your contributions to:

**South Dakota Medical School Endowment
Association**

**1323 South Minnesota Avenue
Sioux Falls, South Dakota 57105**

DISTINGUISHED SERVICE AWARD

Started in 1951 . . . T.F. Riggs, MD, Pierre (deceased)
 1952 .. H. Russell Brown, MD, Watertown (deceased)
 1953 .. Guy VanDemark, MD, Sioux Falls (deceased)
 1954 .. J.C. Ohlmacher, MD, Vermillion (deceased)
 1955 .. R.G. Mayer, MD, Aberdeen (deceased)
 1956 .. J.C. Ohlmacher, MD, Vermillion (deceased)
 1957 .. W.E. Donahoe, MD, Sioux Falls (deceased)
 1958 .. Drs. J.C. Hagin (deceased), M.W. Pangburn
 (deceased), and James DeGeest, Miller
 1958 .. J.F. Brenckle, MD, Superior, WI (deceased)
 1958 .. Mrs. Agnes Holdridge, Madison
 1959 .. R.M. Kilgard, MD, Watertown (deceased)
 1960 .. L.J. Pankow, MD, Sioux Falls (deceased)
 1961 .. Gregg M. Evans, PhD, Custer
 1962 .. Edward Shaw, PhD, Vermillion (deceased)
 1963 .. Arthur A. Lampert, Sr., MD, Rapid City (deceased)
 1964 .. John C. Foster, Phoenix, AZ
 1965 .. A.P. Reding, MD, Marion
 1966 .. Mrs. C. Rodney Stoltz, Sioux Falls
 1967 .. Mrs. William Fish, Watertown
 1968 .. G.J. Bloemendaal, MD, Ipswich (deceased)
 1969 .. F.W. Haas, MD, Yankton (deceased)
 1970 .. Paul Bunker, MD, Aberdeen (deceased)
 1971 .. E.T. Lietzke, MD, Beresford (deceased)
 1972 .. C.B. McVay, MD, Yankton (deceased)
 1973 .. G.E. Tracy, MD, Watertown
 1974 .. J.A. Muggly, MD, Madison (deceased)
 1975 .. Harvey Wollman, Hitchcock
 1976 .. R.H. Quinn, MD, Spearfish
 1977 .. E.H. Heinrichs, MD, Vermillion (deceased)
 1978 .. John Olson, Sioux Falls and
 Evans Nord, Sioux Falls (deceased)
 1979 .. Helen Jane Hare, MD, Rapid City
 1980 .. Warren Jones, MD, Sioux Falls
 1981 .. Saul Friefeld, MD, Brookings
 1982 .. G. Robert Bartron, MD, Watertown
 1983 .. Oscar J. Mabee, MD, Mitchell (deceased)
 1984 .. Karl Wegner, MD, Sioux Falls
 1985 .. William R. Taylor, MD, Aberdeen
 1986 .. R.E. VanDemark, Sr., MD, Sioux Falls (deceased)
 1987 .. Bruce C. Lushbough, MD, Brookings
 1988 .. John J. Stransky, MD, Watertown
 1989 .. John Barlow, MD, Rapid City
 1990 .. Durward Lang, MD, Sioux Falls (deceased)
 1991 .. Russell H. Harris, MD, Sioux Falls (deceased)
 1992 .. Joseph N. Hamm, MD, Sturgis (deceased)
 1993 .. Robert L. Ferrell, MD, Rapid City
 1994 .. Richard G. Gere, MD, Mitchell
 1995 .. Thomas L. Krafka, MD, Rapid City
 1996 .. Theodore H. Sattler, MD, Yankton
 1997 .. Robert Talley, MD, Sioux Falls
 1998 .. Paul Hohm, MD, Huron
 1999 .. James Engelbrecht, MD, Rapid City
 2000 .. Milton Mutch, MD, Sioux Falls

COMMUNITY SERVICE AWARD

1961 .. R.A. Buchanan, MD, Huron (deceased)
 1962 .. Roland F. Hubner, MD, Yankton (deceased)
 1963 .. George W. Mills, MD, Wall (deceased)
 1964 .. John C. Hagin, MD, Miller (deceased)

1965 .. Alonzo P. Peeke, MD, Volga (deceased)
 1966 .. Hugo C. Andre, MD, Vermillion (deceased)
 1967 .. G. Robert Bartron, MD, Watertown
 1968 .. M.M. Morrissey, MD, Pierre (deceased)
 1969 .. N.J. Sundet, MD, Kadoka (deceased)
 1970 .. W.H. Saxton, MD, Huron (deceased)
 1971 .. R.E. VanDemark, Sr, MD, Sioux Falls (deceased)
 1972 .. R.H. Hayes, MD, Wall (deceased)
 1973 .. B.F. King, MD, Aberdeen (deceased)
 1974 .. M.C. Tank, MD, Brookings (deceased)
 1975 .. Karl Wegner, MD, Sioux Falls
 1976 .. John T. Elston, MD, Rapid City
 1977 .. W.F. Stanage, MD, Yankton
 1978 .. C.S. Roberts, Jr., MD, Brookings
 1979 .. C.J. McDonald, MD, Sioux Falls (deceased)
 1980 .. E.A. Johnson, MD, Milbank (deceased)
 1981 .. J.A. Muggly, MD, Madison (deceased)
 1982 .. Robert R. Giebink, MD, Sioux Falls
 1983 .. Theodore H. Sattler, MD, Yankton
 1984 .. Paul Hohm, MD, Huron
 1985 .. George Mangulis, MD, Philip
 1986 .. Richard Friess, MD, Sioux Falls
 1987 .. Melford B. Lyso, MD, Sioux Falls (deceased)
 1988 .. Brooks Ranney, MD, Yankton
 1989 .. William R. Taylor, MD, Aberdeen
 1990 .. Reuben Bareis, MD, Rapid City
 1991 .. O. Myron Jerde, MD, Rapid City
 1992 .. Duane Reaney, MD, Yankton
 1993 .. Nathaniel Whitney, MD, Rapid City (deceased)
 1994 .. Granville H. Steele, MD, Aberdeen
 1995 .. James E. Ryan, MD, Sioux Falls (deceased)
 1996 .. Howard L. Saylor, Jr., MD, Huron
 1997 .. William E. Jones, MD, Sturgis (deceased)
 1998 .. Bernard Gerber, MD, Aberdeen
 1999 .. James C. Larson, MD, Watertown
 2000 .. R.Gene Nemer, MD, Gregory and
 Michael Olson, MD, Sioux Falls

FIFTY YEAR CLUB MEMBERS

Leroy Askwig, MD, Pierre (deceased)
 C.V. Auld, MD, Plankinton (deceased)
 Harold Adams, MD, Huron (deceased)
 Wallace Arneson, MD, Sioux Falls
 G. Robert Bartron, MD, Watertown
 Clayton Behrens, MD, Rapid City
 Thomas Billion, MD, Sioux Falls (deceased)
 G.J. Bloemendaal, MD, Ipswich (deceased)
 Henry Borgmeyer, MD, Rapid City
 Donald H. Breit, MD, Sioux Falls (deceased)
 W.C. Brinkman, MD, Sisseton (deceased)
 R.A. Buchanan, MD, Huron (deceased)
 John L. Calene, MD, CA (deceased)
 Myrtle Carney, MD, TX (deceased)
 Bernard S. Clark, MD, Spearfish (deceased)
 J.C. Clark, MD, Sioux Falls (deceased)
 F.L. Class, MD, Huron (deceased)
 M.E. Cogswell, MD, Wolsey (deceased)
 E.H. Collins, MD, Gettysburg
 J. Cook, MD, Bonesteel (deceased)
 G.I.W. Cottam, MD, Sioux Falls (deceased)
 Harold L. Crane, MD, CT (deceased)

Roscoe E. Dean, MD, Wessington Springs
 Robert J. Delaney, Jr., MD, Mitchell (deceased)
 S.A. Donahoe, MD, Sioux Falls (deceased)
 W.E. Donahoe, MD, Sioux Falls (deceased)
 J.A. Eckrich, Sr., MD, Aberdeen (deceased)
 V.W. Embree, MD, Pierre (deceased)
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 D.A. Gregory, MD, MT (deceased)
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 M. Stuart Grove, MD, Sioux Falls (deceased)
 Clifford Gryte, MD, Huron
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 J.C. Hagin, MD, Miller (deceased)
 Joseph Hamm, MD, Rapid City
 Helen Jane Hare, MD, Rapid City
 Lyle Hare, MD, Spearfish (deceased)
 Robert Henry, MD, Brookings
 John Hermanson, MD, Brandon
 John F. Hill, MD, Yankton (deceased)
 Emil Hofer, MD, Huron (deceased)
 J.A. Hohf, MD, Yankton (deceased)
 Paul H. Hohm, MD, Huron
 Theodore A. Hohm, MD, Huron
 Lambert Holland, MD, Chamberlain
 F.S. Howe, MD, Deadwood (deceased)
 A.H. Hovne, MD, Salem (deceased)
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 R.J. Jackson, MD, Hot Springs (deceased)
 J.A. Jacotel, MD, Milbank (deceased)
 John B. Janis, MD, Sioux Falls
 G.T. Jordan, MD, Vermillion (deceased)
 Irvin Kaufman, MD, Freeman
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 T.F. O'Toole, MD, Rapid City (deceased)
 Gordon S. Owen, MD, Rapid City (deceased)
 N.T. Owen, MD, Rapid City (deceased)
 L.L. Parke, MD, Canton (deceased)
 C.C. Pascale, DO, Centerville (deceased)
 A.P. Peeke, MD, Volga (deceased)

M.O. Pemberton, MD, Deadwood (deceased)
 R.J. Quinn, MD, Sioux Falls (deceased)
 Robert H. Quinn, MD, Spearfish
 F.J. Radusch, MD, CA (deceased)
 Brooks Ranney, MD, Yankton
 T.B. Ranney, MD, Aberdeen (deceased)
 Duane Reaney, MD, Yankton
 Arthur P. Reding, MD, Marion
 T.F. Riggs, MD, Pierre (deceased)
 Maurice Rousseau, MD, Watertown (deceased)
 I.R. Salladay, MD, Ft. Meade (deceased)
 Mary Sanders, MD, Redfield
 T.H. Sattler, MD, Yankton
 W.H. Saxton, MD, Huron (deceased)
 H.L. Saylor, MD, Huron (deceased)
 Howard L. Saylor, Jr., MD, Huron
 C.S. Schad, DO, Rapid City
 C.E. Sherwood, MD, Brookings (deceased)
 Howard Shreves, MD, Sioux Falls
 Bernhoff R. Skogmo, MD, Mitchell
 Arthur W. Spiry, MD, Mobridge (deceased)
 Fred S. Stahmann, MD, Sioux Falls
 Granville Steele, MD, Aberdeen
 John Stransky, MD, Watertown
 Myron Tank, MD, Brookings (deceased)
 F.J. Tobin, MD, Mitchell (deceased)
 Leonard W. Tobin, MD, Mitchell (deceased)
 J.S. Tschetter, MD, Huron (deceased)
 Paul Tschetter, MD, Huron (deceased)
 F.W. Valkenaar, MD, Chancellor (deceased)
 G.E. VanDemark, MD, Sioux Falls (deceased)
 Robert E. VanDemark, Sr., MD, Sioux Falls (deceased)
 Cleo L. Vogeles, MD, Aberdeen
 H.P. Volin, MD, Lennox (deceased)
 C.H. Weishaar, MD, Aberdeen (deceased)
 J.R. Westaby, MD, Madison (deceased)
 Robert Westaby, MD, Rapid City
 Thomas Willcockson, MD, Yankton
 Francis R. Williams, MD, Rapid City (deceased)
 James Yackley, MD, Rapid City (deceased)
 G.E. Zimmerman, MD, MT (deceased)

C. B. ALFORD AWARD

1974 .. Roscoe Dean, MD, Wessington Springs
 1975 .. Gerald Tracy, MD, Watertown
 1976 .. Robert Westaby, MD, Hot Springs
 1977 .. Robert VanDemark, Sr., MD, Sioux Falls
 (deceased)
 1978 .. Howard Saylor, Jr., MD, Huron
 1979 .. J.D. Bailey, MD, Rapid City (deceased)
 1980 .. John T. Elston, MD, Rapid City
 1981 .. T.H. Sattler, MD, Yankton
 1982 .. Bedford T. Otey, MD, Flandreau (deceased)
 1983 .. Robert H. Quinn, MD, Spearfish
 1984 .. Granville Steele, MD, Aberdeen
 1985 .. Robert Hayes, MD, Wall (deceased)
 1986 .. Leonard Linde, MD, Mobridge
 1987 .. Richard Sample, MD, Madison
 1988 .. Willis Stanage, MD, Yankton
 1989 .. Reuben Bareis, MD, Rapid City
 1990 .. Rodney Parry, MD, Sioux Falls

1991 .. Donald Humphreys, MD, Sioux Falls
 1992 .. Thomas Welty, MD, Rapid City
 1993 .. Loren Amundson, MD, Sioux Falls
 1994 .. Ruggles Stahn, MD (deceased) and
 Christopher Krogh, MD (deceased)
 1995 .. Allen Nord, MD, Rapid City
 1996 .. Thomas Looby, MD, Sioux Falls
 1997 .. David Sandvik, MD, Rapid City
 1998 .. John F. Barlow, MD, Rapid City

SPECIAL PRESIDENTIAL AWARD

1979 .. G. Robert Bartron, MD, Watertown
 1983 .. Gerald E. Tracy, MD, Watertown
 1986 .. Russell H. Harris, MD, Rapid City (deceased)
 1991 .. Robert VanDemark, Sr., MD, Sioux Falls
 (deceased)
 1991 .. Dennis L. Johnson, MD, Sioux Falls (deceased)
 1991 .. Parry S. Nelson, MD, Watertown (deceased)
 1994 .. William G. Porter, Rapid City
 1996 .. Robert D. Johnson, Sioux Falls and
 Jan Anderson, Sioux Falls
 1997 .. Howard Saylor, Jr., MD, Huron
 1998 .. Robert L. Ferrell, MD, Rapid City
 1999 .. John F. Barlow, MD, Rapid City
 2000 .. James Larson, MD, Watertown

MEDIA AWARD

1993 .. Bobbi Lower, Sioux Falls
 1994 .. Helene Duhamel, Rapid City
 1995 .. Jerry Walton, MD, Sioux Falls
 1996 .. Richard Holm, MD, Brookings
 1997 .. Alex Strauss, Sioux Falls
 1998 .. Mark Andersen, Rapid City
 2000 .. Gordon Garnos, Watertown

YOUNG AT HEART AWARD

1993 .. Gerald Tracy, MD, Watertown
 1994 .. Helen Jane Hare, MD, Rapid City
 1995 .. James E. Ryan, MD, Sioux Falls
 1996 .. Michael McVay, MD, Yankton
 1997 .. John Rittmann, MD, Watertown
 1998 .. Robert H. Quinn, MD, Spearfish
 1999 .. John F. Barlow, MD, Rapid City
 2000 .. Richard Holm, MD, Brookings

OUTSTANDING YOUNG PHYSICIAN AWARD

1999 .. Scott Eccarius, MD, Rapid City
 2000 .. William R. Rossing, MD, Sioux Falls

South Dakota State Medical Association Roster - 2000 Membership by Districts

ABERDEEN

DISTRICT No. 1

Pres, William Pettit, MD

Vice Pres, Arlyn Myrmoe, MD

Sec/Treas, John Vidoloff, MD

Adams, John A. Aberdeen
 Alandy, Antonio Mora Eureka
 Ali, Khurram B. Bowdle
 *Altman, Stanley B. Aberdeen
 *Anderson, Esther E. Aberdeen
 Bachmayer, Jay D. Aberdeen
 Berg, Sterling Redfield
 Berry, Scott H. Aberdeen
 Bhatia, Aruna Aberdeen
 Bock, Jeffrey S. Aberdeen
 Bormes, John M. Aberdeen
 Born, Tage E. Aberdeen
 *Broadhurst, Kennon E. Aberdeen
 Bunker, Thomas G. Aberdeen
 Carlson, Gregg W. Aberdeen
 *Carter, Peter B. Aberdeen
 Chang, Joe P. Aberdeen
 Chavier, Juan R. Aberdeen
 *Christopher, John R. OR
 Cihak, Robert Aberdeen
 D'Souza, Edward P. Aberdeen
 Eckrich, Paul C. Aberdeen
 *Eckrich, Jr., Jerome A. Aberdeen
 Ellerbusch, David A. Aberdeen
 *Fahrenwald, Myron E. Conde
 Frisco, Donald J. Aberdeen
 Fritz, John R. Aberdeen
 *Gerber, Bernard C. Aberdeen
 Gerber, Jean L. Aberdeen
 Giridhar, Sanjeevi Aberdeen
 Gruca, Pawel Aberdeen

harlow, Mark C. Aberdeen
 Hart, Harvey J. Aberdeen
 Holkesvik, Reid E. Aberdeen
 Holte, Michael J. Aberdeen
 *Hovland, James I. Aberdeen
 Jundt, Kim W. Aberdeen
 Kimbler, Carl Aberdeen
 Kimmel, Douglas Aberdeen
 Knowles-Smith, Peter Buffalo Gap
 *Kom, Carlton J. Aberdeen
 *Kosse, Karl H. Aberdeen
 Kuglitsch, Michael Aberdeen
 Landes, Fred Aberdeen
 Lechner, Thomas Aberdeen
 *Leon, Paul R. Aberdeen
 Lundell, Caroline Aberdeen
 Luzier, Thomas L. Aberdeen
 Lynch, Patrick Henry Aberdeen
 MacDougall, James B. Aberdeen
 Mahan, John Aberdeen
 Matsuda, James Aberdeen
 Matushin, Clifford M. Aberdeen
 Mayo, Chester W.P. Aberdeen
 Mayo, Julie Aberdeen
 McFee, John L. Bowdle
 McGee, James Aberdeen
 Mendoza, Eric Aberdeen
 Miller, Charles Aberdeen
 Mogen, Mark P. Aberdeen
 Morris, Mary I. Redfield
 Myrmoe, Arlyn M. Aberdeen
 *Odland, Winston B. Aberdeen

Ostrowski, Susan M. Eureka
 Owens, Matthew P. Redfield
 Parker, Jeffrey C. Aberdeen
 *Patterson, David M. Redfield
 Peters, Stephen R. Aberdeen
 Pettit, William R. Aberdeen
 Purinton, Scott J. Britton
 Rak, Richard A. Aberdeen
 Redmond, Steven T. Aberdeen
 Redmond, Warren J. Aberdeen
 Reynen, Matthew Aberdeen
 Rovang, Ronald Aberdeen
 *Sanders, Mary E. Redfield
 *Scheffel, Alvin R. IA
 *Seaman, David Spearfish
 Sidaway, Larry Aberdeen
 Siegmund, Sheryl Aberdeen
 Small, Donna M. britton
 *Steele, Granville H. Aberdeen
 Suurmeyer, Robert D. Aberdeen
 *Taylor, William R. Aberdeen
 VanDeWalle, Katheleen Aberdeen
 Vidoloff, John C. Aberdeen
 *Vogele, Cleo L. Aberdeen
 Wachs, David M. Aberdeen
 Waterman, Timothy R. Aberdeen
 Weekly, James M. Aberdeen
 Werth, Roger W. Aberdeen
 Wischmeier, Curt A. Aberdeen
 Wrage, Darla J. Aberdeen
 *Zvejnieks, Karlis Aberdeen

WATERTOWN

DISTRICT No. 2

Pres, Ramona Peshek, MD

Vice Pres, Malcolm Bull, MD

Sec/Treas, Ramona Peshek, MD

*Allen, Jr., Stanley W. Watertown
*Argabrite, John W. Watertown
*Bartron, G. Robert Watertown
Breske, Colleen J. Watertown
Bull, Malcolm I. Watertown
Carter, Roger L. Watertown
Charbonneau, Paul Watertown
Crank, Robert N. Watertown
Crismon, Craig E. Watertown
*Desai, B.J. AZ
Devine, William Watertown
*Fedt, Donald N. Watertown
Feeney, Steven P. Watertown
Flaherty, Daniel Watertown
Gehring, Stephen H. Watertown
Gerrish, Catherine C. Watertown
Gerrish, Ed Watertown
Gesink, Melvin H. Watertown
Hamlyn, Harry Watertown
Hanson, Bernie H.P. Watertown

Hendricks, Zeke L. Watertown
Homing, James R. Watertown
*Huppler, Edward G. MN
Johnson, Kenneth M. Watertown
Jones, James A. Watertown
Kolodychuk, Leonard Watertown
Larson, Gregory R. Watertown
Larson, James C. Watertown
Lawrence, Alan A. Watertown
Likness, Clark W. Watertown
Mazurczak, Miroslaw A. Clear Lake
*Meyer, Robert J. Watertown
Monfore, James E. Watertown
Nipe, Hollis D. Watertown
O'Dea, Maureen Watertown
Ostby, Jason R. Watertown
Peshek, Ramona Watertown
Peterson, Kenneth B. Watertown
Peterson, Linda R. Watertown
Reed, Anne Marie Watertown

Reiffenberger, Dan H. Watertown
Reiffenberger, Sarah A. Watertown
Retterath, Patrick L. Watertown
Rittmann, John E. Watertown
Rogotzke, Kenneth H. Watertown
Roseth, Calvin A. Watertown
Schwartz, John Watertown
Seeman, Terry L. Watertown
Shives, Aaron B. Watertown
Snyder, Wayne E. Watertown
*Stransky, John J. Watertown
Stys, Adam Clear Lake
Stys, Maria Clear Lake
Thompson, M. George Watertown
Tracy, Gerald E. Sioux Falls
Vener, Michael Watertown
Wegner, Edward L. Watertown
Wilde, Kim L. Watertown
*Wrage, Jr., Theodore J. Watertown

MADISON/BROOKINGS

DISTRICT No. 3

Pres, Heather Christensen, MD

Vice Pres, Robert Summerer, DO

Sec/Treas, Richard Holm, MD

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*Belatti, Richard G. Madison
Brown, Russell T. Sioux Falls
Bruning, Gary L. Flandreau
Cecil, Daniel P. Brookings
Chalames, Ingrid A. Brookings
Christensen, Heather L. Brookings
Filler, Elliott W. Brookings
*Friefeld, Saul MN
Hassan, Adel A.F. Madison
Heilman, Bernard F. Madison
*Henry, Robert B. Brookings
Hieb, Richard S. Brookings

Holm, Richard P. Brookings
Jacobs, Tad B. Flandreau
Johnson, Thomas C. Brookings
Johnston, Debra J. Brookings
Kohl, David A. Madison
*Lampert, Jr., Arthur A. Rapid City
*Lushbough, Bruce C. Brookings
*McHardy, Bryson R. Aurora
*Patt, Walter AR
*Peik, Donald J. FL
Ramsay, John D. Brookings
Rietz, Robert R. Brookings
*Roberts, Jr., Charles S. Brookings

Sample, Richard G. Madison
Saxena, Kumud Brookings
Saxena, Satish C. Brookings
Sergeev, Tatiana Brookings
*Shaskey, Robert E. Brookings
Sherlock, John L. Sioux Falls
*Stensrud, Homer J. MN
Tesch, Ronold R. Brookings
Turner, Gerald L. Brookings
Wake, Richard A. Brookings
Warren, Merritt G. Brookings
Wetzberger, Wayne A. Madison

HURON

DISTRICT No. 5

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Sec/Treas, John Berg, MD

*Anderson, James A. Huron
Becker, Michael N. Huron
*Bell, G. Robert DeSmet
Belyea, Mark E. Huron
Berg, John A. DeSmet
Blessinger, Karl J. Huron
Cole, James Huron
*Dean, Roscoe E. Wess. Spgs
Dean, Thomas M. Wess. Spgs
*DeGeest, James H. AZ
*Gryte, Clifford F. Huron
Guerin, Jr., Michael J. Woonsocket
Haatvedt, Cy B. Huron
Hanson, Jeffrey W. Huron

*Hanson, William O. Huron
Hohm, Paul H. Huron
Hohm, Robert C. Huron
Holtmeier, Douglas Huron
Huber, Joel B. Miller
*Huet, William G.M. Huron
Kapur, Hiroo R. Huron
Kapur, Ravi Huron
Karlen, Louis W. DeSmet
Landreth, Jr., Knute Huron
Lausterer Jack Huron
Loewen, Nathan H. Huron
McKenney, Janice Huron
Minnhaar, Guillermo T. TX
Nicholas, George A. Huron

Reed, Richard H. Huron
Robbins, John K. Sioux Falls
*Saylor, Jr., Howard L. Huron
Schroeder, Stephan D. Miller
Sikkink, Kari Rae Wess. Spgs
*Smith, Richard N. Pierre
Snedden, John P. Huron
Truh, Lois I. Huron
Van Marel, Douglas Huron
Waldby, Gail E. Huron
Wheeler, Jeffrey S. Huron
Whitcroft, Ian Huron
Wiedel, Gregory Huron
Yao, Edmund Wess. Spgs

MITCHELL

DISTRICT No. 6

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Vice Pres, James Gaede, MD

Sec/Treas, Raid Sulaiman, MD

Anderson, Ronald D.	Mitchell	*Holland, Lambert W.	Chamberlain	Nedved, Lonnie J.	Mitchell
Bentz, Jerome W.	Platte	Holum, Douglas M.	Mitchell	Nelsen, Marcia K.	Mitchell
Berry, Jack T.	Mitchell	Honke II, Richard W.	Parkston	Olegario, Jr., Filemon E.	Mitchell
Bhat, Dileep S.	Mitchell	Howe, Jerome K.	Mitchell	*Porter, Maynard	Parkston
Bieberly, Jr., Frank G.	Chamberlain	Hunt, Ralph E.	Chamberlain	Ramos, Manuel D.	Scotland
Birkenkamp, Ray T.	Mitchell	Jensen, Richard A.	Mitchell	Rasmussen, Paul H.	Mitchell
Brady, John	Scotland	Jones, D. Brynley	Platte	*Schabauer, Ernest A.	Rapid City
Brink, Darin	Parkston	Jones, John B.	Chamberlain	*Skogmo, Bernhoff R.	Mitchell
Brown, Marden	Chamberlain	Kundel, David G.	Mitchell	Sorrels, William F.	Mitchell
Buhler, Carey C.	Mitchell	Kundel, Robert R.	Chamberlain	Sulaiman, Raed A.	Mitchell
Campbell, Theresa M.	Mitchell	Leland, Dennis G.	Mitchell	Tjarks, Brian D.	Mitchell
Christensen, Martin J.	Mitchell	Lorenzen, Kim M.	Mitchell	Tricarico, Joseph	Mitchell
Crandell, Michael P.	Kennebec	Luebke, Marlys L.	Corsica	VanErdewyk, John M.	Mitchell
*Delaney, Jr., William A.	Mitchell	Malters, David T.	Mitchell	VanErt, Gary P.	Chamberlain
Dilger, Sr., Joseph T.	Parkston	Malters, Patricia B.	Mitchell	*Visani, Sandro	Mitchell
Gaede, James E.	Mitchell	Margallo II, Lucio N.	Mitchell	*Vose, James L.	NE
*Gere, Richard G.	Mitchell	Maroun, Christiane R.	Mitchell	Wagner, Rick J.	Mitchell
Graham, William N.	Mitchell	Matheny, Theodore	Chamberlain	*Weatherill, Donald W.	Mitchell
Haley, Michael D.	Mitchell	McWhirter, Robert E.	Mitchell	Willcutts, Jr., Morton D.	Chamberlain
Haq, Anwarul	Mitchell	*Monson, Charles D.	Parkston	Withrow, Mark L.	Mitchell
		*Mueller, Eric H.	Tripp		

SIoux FALLS

DISTRICT No. 7

Pres, John Oliphant, MD

Vice Pres, Tom Masterson, MD

Sec, E. Paul Amundson, MD

Treas, Peter Andreone, MD

Aamlid, Brian C.	Sioux Falls	Behrend, Robert D.	Sioux Falls	Carver, Terrence	Sioux Falls
Abu-Ghazaleh, Samir Z.	Sioux Falls	Behrens, Jeffrey	Sioux Falls	Cass, Joseph R.	Sioux Falls
Adam-Burchill, Paula	Sioux Falls	Bell, Douglas G.	Sioux Falls	Catalano, Peter	Sioux Falls
Akins, Robert	Sioux Falls	Benson, Gail M.	Sioux Falls	*Chalmers, James H.	Sioux Falls
Aldrich, Marc N.	Sioux Falls	Benson, Margaret A.	Sioux Falls	Chester, Darren D.W.	Brandon
Allen, Raymond H.	Sioux Falls	Benzmiller, Phillip	Sioux Falls	Cho, Dong S.	Sioux Falls
Alvine, Frank G.	Sioux Falls	Bernardo, Rosaleah	Sioux Falls	Cho, Myung J.	Sioux Falls
Alvine, Gregory	Sioux Falls	Beshai, Emad	Freeman	Christopherson, Thomas J.	Sioux Falls
Amundson, E. Paul	Sioux Falls	Bess, Michael A.	Sioux Falls	*Church, Bill	Sioux Falls
*Amundson, Loren H.	Sioux Falls	Bhatara, Vinod S.	Sioux Falls	Cink, Paul A.	Sioux Falls
*Anderson, Courtney W.	Sioux Falls	Billion, Stephen P.	Sioux Falls	Cink, Thomas M.	Sioux Falls
Anderson, Edward F.	Sioux Falls	Bishop, Donald T.	Sioux Falls	Clark, Edward T.	Sioux Falls
Anderson, Keith A.	Sioux Falls	Blake, Jerome M.	Sioux Falls	Cole, Shelley J.	Sioux Falls
Andreone, Peter A.	Sioux Falls	Blow, Jerry	Sioux Falls	Crosby, Daniel	Sioux Falls
Andrus, Milan	Sioux Falls	Blue, Daniel W.	Sioux Falls	Culey, Shawn R.	Dell Rapids
*Arneson, Wallace A.	Sioux Falls	Boade, W. Allan	Sioux Falls	*Cutshall, Vincent K.	AR
Asfora, Wilson T.	Sioux Falls	Boelter II, William	Sioux Falls	Czarnecki, Edward J.	Sioux Falls
Ashbaugh, James H.	Sioux Falls	Boice, John L.	Sioux Falls	D'Ascoli, Peter	MN
Aspaas, Jr., P. Kenneth	Sioux Falls	Bottolfson, Diane	Sioux Falls	Dahl, Robert K.	Sioux Falls
*Aspaas, Sr., Paul K.	Dell Rapids	Boyens, Scott L.	Sioux Falls	Davis, John B.	Sioux Falls
Assam, Susan F.	Sioux Falls	Braithwaite, Thomas M.	Sioux Falls	*Daw, Edward F.	CO
Atchison, Scott R.	Sioux Falls	Brandenburg, Verdayne R.	Sioux Falls	Day, Ricahrd P.	Sioux Falls
Augsburger, Ken D.	Sioux Falls	Brechtelsbauer, David A.	Sioux Falls	DeClark, Robert P.	Sioux Falls
Awadallah, Sami	Sioux Falls	Brewer, Marshall L.	Sioux Falls	DeHaan, Douglas	Sioux Falls
Bacharach, J. Michael	Sioux Falls	Briggs, Richard	Brandon	Del Monte, William R.	Sioux Falls
Bahnson, Berne B.	Sioux Falls	Brown, Michael J.	Sioux Falls	DeSautel, M. Gregory	Sioux Falls
Baka, Joseph J.	Sioux Falls	Brown, Spencer	Sioux Falls	Devick, Margaret R.	Canton
Bandettini, Francis	Baltic	Bunch, Bonnie	Sioux Falls	Dillon, Bonnie J.	Sioux Falls
Barker, Jr., John D.	Sioux Falls	Burns, Howard W.	Sioux Falls	Dimitrievich, Elizabeth	Sioux Falls
Barness, Bryan	Sioux Falls	Burrish, Gene F.	Sioux Falls	Donelan, Timothy P.	Sioux Falls
*Barnett, George L.	Sioux Falls	Bynum, Gaither	Sioux Falls	Duffek, Susan	Sioux Falls
Barth, Richard J.	Sioux Falls	Carlson, Walter O.	Sioux Falls	Durso, John V.	Sioux Falls
Bauer, Barry C.	Sioux Falls	Carpenter, Paul L.	Sioux Falls	Dzintars, Valdis A.	Sioux Falls
Bean, David W.	Sioux Falls	Carroll, Nancy L.	Sioux Falls	*Easton, Jessie K.M.	Sioux Falls

Eckhoff, P. James	Sioux Falls	Harvison, Gregg A.	Sioux Falls	Kutayli, Farid	Sioux Falls
Ecklund, Scott W.	Sioux Falls	Hassebrook-Johnson, Jeanne	Sioux Falls	Labesky, James W.	Sioux Falls
Effat, Mohamed	Sioux Falls	Haun, Steven	Sioux Falls	*Lakstigala, Peters E.	Sioux Falls
Eidsness, LuAnn M.	Sioux Falls	Hearn, Valerie L.	Sioux Falls	Landeen, Laurie	Sioux Falls
*Elkjer, Neil J.	IA	Heckmann, Robert E.	Sioux Falls	Lang, Terry A.	Sioux Falls
Elshami, Ashraf	Sioux Falls	Heddleston, Les	Sioux Falls	Lankhorst, Barry J.	Sioux Falls
Elson, David L.	Sioux Falls	Hedges, Craig P.	Sioux Falls	Laput, Aleksandra M.	CO
English, Gilbert L.	Sioux Falls	Heiling, Karen J.	Sioux Falls	Larsen, David A.	Sioux Falls
*Emsberg, Dorence L.	Sioux Falls	Heinemann, Daniel J.	Canton	Larsen, Laura J.R.	Sioux Falls
*Entwistle, Frederick R.	Sioux Falls	Held, William E.	Sioux Falls	Larson, Eric A.	Sioux Falls
Ephgrave, Pamela M.	Sioux Falls	Helmbrecht, Gary D.	Sioux Falls	Lawler, Patrick J.	Sioux Falls
*Epp, Dennis L.	Freeman	Helvig, Bethany	Sioux Falls	*Lee, Si Gaph	CA
Erickson, David K.	Dell Rapids	Hennies, Cathy	Canton	Lindemann, Janet	Sioux Falls
Erickson, Kirsten R.	Sioux Falls	Henrickson, Lynn A.	Sioux Falls	Lockwood, Scott A.	Sioux Falls
Erie, John K.	Sioux Falls	Henry, Scott D.	Sioux Falls	Lockwood, William W.	Sioux Falls
Famestad, Gary L.	Sioux Falls	Herbster, Stacey	Sioux Falls	Looby, Peter A.	Sioux Falls
Fanciullo, Joseph	Sioux Falls	*Hermanson, John M.	Brandon	Looby, Thomas L.	Sioux Falls
*Farrell, Harry W.	CA	Hibbard, Michael D.	Sioux Falls	Lovrien, Fred C.	Sioux Falls
Farritor, Michael E.	Sioux Falls	Hill, Laurie M.	Sioux Falls	Lukanova, Adriana	Sioux Falls
Fausch, Mark	Sioux Falls	Hofer, Catherine M.	Sioux Falls	Lunn, Robert	Sioux Falls
Fenton, Lawrence J.	Sioux Falls	Hofer, Darlys R.	Sioux Falls	Mabee, Jr., Lee M.	Sioux Falls
Fernandez Kiemele, Marissa	Sioux Falls	Hoffman, Wendell W.	Sioux Falls	MacRandall, Daniel G.	Sioux Falls
*Ferrell, Michael R.	Sioux Falls	Hohm, Byron T.	Sioux Falls	Madison, Dean L.	Sioux Falls
Fiegen, Michael M.	Sioux Falls	*Hohm, Theodore A.	Sioux Falls	Magnuson, Gregory L.	Sioux Falls
Finney, Lawrence W.	Sioux Falls	Horner, William J.	Sioux Falls	Mailloux, Edward	Sioux Falls
Fischer, Jeffrey	Sioux Falls	Hosen, Richard S.	Sioux Falls	Mallek, John A.	Sioux Falls
*Fisk, Robert G.	Sioux Falls	*Hoskins, John H.	Sioux Falls	Marckstadt, Gary S.	Sioux Falls
Fletcher, Harold J.	Sioux Falls	Hoversten, David L.	Sioux Falls	Mark, Curtis L.	Viborg
Flevares, James W.	Sioux Falls	Howard, Richard J.	Sioux Falls	Marten, Brian R.	Sioux Falls
Flickema, Dawn A.	Sioux Falls	Howey, Tom D.	Sioux Falls	Masterston, Thomas E.	Sioux Falls
Flom, Jon O.	Sioux Falls	Hoxtell, Eugene O.	Sioux Falls	Matos, Eugenio B.	Sioux Falls
*Flora, George C.	Sioux Falls	Humphreys, Donald W.	Sioux Falls	McConnell, Michael	Sioux Falls
Foley, Stephen T.	Sioux Falls	Hurley, Brian T.Sioux	Sioux Falls	McCreary, Miriam	Sioux Falls
Fox, Mark	Sioux Falls	Hurley, Christopher M.	Sioux Falls	McGrann, James R.	Sioux Falls
Frazer, Paul D.	Sioux Falls	Hurley, Dominic (Mick)	Sioux Falls	McGreevy, Patrick S.	Sioux Falls
Free, Nancy M.	Sioux Falls	Hurley, Timothy E.	Sioux Falls	McHale, Michael	Sioux Falls
Free, Thomas W.	Sioux Falls	Hurley, Willard C.	Sioux Falls	McKay, Julie	Sioux Falls
Freeman, Jerome W.	Sioux Falls	Hussain, Rif'at	Sioux Falls	McKenzie, Matthew	Sioux Falls
Friess, Richard W.	Sioux Falls	*Hyland, Lowell J.	Sioux Falls	McKercher, Scott W.	Sioux Falls
*Frost, Donald M.	Sioux Falls	Isaacson, Thomas C.	Sioux Falls	McLaughlin, Julie	Sioux Falls
Fuller, William C.	Sioux Falls	Jamison, Darla D.	Sioux Falls	McMenamy, Kandi R.	Sioux Falls
Fullerton, Thomas E.	Sioux Falls	*Janis, John B.	WI	McMillin, J. Michael	Sioux Falls
Funk, Allen	Sioux Falls	Jaqua, Richard A.	Sioux Falls	McQuitty, Dwayne A.	Sioux Falls
Gaeckle, C. Thomas	Sioux Falls	Jassim, PhD, Ali D.	Sioux Falls	Meierhenry, Mary E.	Sioux Falls
Gaetze, Jane	Sioux Falls	Jerstad, John P.	Yankton	Meyer, Robert D.	Sioux Falls
Gaspari, Jack C.	Sioux Falls	Johnson, Jorge H.	Sioux Falls	Meyer, Vaughn H.	Sioux Falls
Geise, Douglas H.	Sioux Falls	Johnson, Julie	Sioux Falls	Mikovsky, Peter	Sioux Falls
George, Robert J.	Sioux Falls	Johnson, Mark W.	Sioux Falls	Miles, Carol	Sioux Falls
*Giebink, Robert R.	Sioux Falls	Johnson, Peter D.	Sioux Falls	Miller, L. Patrick	Sioux Falls
Giebink, Robert Wm.	Sioux Falls	Johnson, R.C.	Sioux Falls	Moeller, Michael	Sioux Falls
Golbert, Thomas M.	Sioux Falls	Jones, Warren L.	Sioux Falls	Moench, Jerry L.	Sioux Falls
Gordon, Mark S.	Sioux Falls	Kalda II, Ellison F.	Sioux Falls	Mohama, Riyad	Sioux Falls
Gordon, Mark S.	Sioux Falls	Kangley, Daniel J.	Sioux Falls	Mohler, Charles W.	Sioux Falls
Grady, Robert E.	Sioux Falls	Kannan, Hari D.	Colton	Morris, Alan D.	Sioux Falls
Graham, Donald B.	Sioux Falls	Kapaska, David L.	Sioux Falls	Morse, Peter H.	Sioux Falls
Green, Marc A.	Sioux Falls	Kaplan, Richard A.	Sioux Falls	Mukherjee, Asish	Sioux Falls
Greene, Derek	Sioux Falls	Karl, Stephen R.	Sioux Falls	Munson, David P.	Sioux Falls
Greene, Stacia	Sioux Falls	*Kaufman, Irvin I.	Freeman	Murphy, Karla K.	Sioux Falls
*Greenfield, Duane L.	Sioux Falls	Kearney, Kathleen	Sioux Falls	Murray, Jeffrey A.	Sioux Falls
*Gregg, John B.	Sioux Falls	Kellerman, Paul	Sioux Falls	*Mutch, Jr., Milton G.	Sioux Falls
Gregg, Mark	Sioux Falls	Kemp, Earl D.	Sioux Falls	Nagelhout, David A.	Sioux Falls
Griffin, John F.	Sioux Falls	Kennelly, Daniel J.	Sioux Falls	Naughton, Gregory	Sioux Falls
*Gross, H. Phil	CA	Keppen, Laura A.	Sioux Falls	Neidich, Gary A.	Sioux Falls
*Gunnarson, Richard E.	Sioux Falls	Keppen, Michael	Sioux Falls	Nelmark, Robert A.	Sioux Falls
*Gutch, Charley F.	Sioux Falls	Kidman, Brian K.	Sioux Falls	Nelson, David C.	Sioux Falls
Gutnik, Leonard M.	Sioux Falls	Kiernan, James	Sioux Falls	Nelson, Earl G.	Sioux Falls
Gutnik, Steven H.	Sioux Falls	Kihne, Michael J.	Sioux Falls	Nelson, Patrick A.	Sioux Falls
Halma, Gary A.	Sioux Falls	Kirton, Jr., Kenneth T.	Freeman	Nelson, Richard A.	Sioux Falls
Hammer, Bryan J.	Sioux Falls	Knudson, Donald H.	Sioux Falls	*Nelson, Robert E.	Sioux Falls
Hanna, Marwan D.	Sioux Falls	Knutson, Dennis D.	Sioux Falls	Nemeh, Mazen	Sioux Falls
Hansen, Keith	Sioux Falls	Kofoed, Lial L.	Hot Springs	*Nice, Richard F.	Sioux Falls
Hardie, Richard D.	Sioux Falls	Koob, K. Gene	Sioux Falls	Nielsen, James L.	Dell Rapids
Harris, Frederick L.	Sioux Falls	Kooima, Rick	Sioux Falls	Nord, Wesley J.	Sioux Falls
Harris, Mary Helen	Sioux Falls	Kreger, Donald O.	Sioux Falls	Nussbaum, David K.	Sioux Falls
Hart, Christine Rae	Sioux Falls	Krome, Lori A.	Dell Rapids	Nykamp, Verlyn	Sioux Falls
Hartmann, Alfred E.	Sioux Falls	Kunkel, Steve E.	Sioux Falls	O'Brien, Charles P.	Sioux Falls
Hartzell, Allan J.	Sioux Falls				

O'Brien, Peter J.	Sioux Falls	Rossing, David R.	Sioux Falls	Tajchman, Urszula	Sioux Falls
O'Shea, Timothy	Sioux Falls	Rossing, Ronald M.	Sioux Falls	Talley, Robert C.	Sioux Falls
Oakland, James A.	Sioux Falls	Rossing, William O.	Sioux Falls	Tam, Guy E.	Sioux Falls
Ofstein, Lewis C.	Sioux Falls	Rossing, William R.	Sioux Falls	Tancabelic, Jakica	Sioux Falls
Ohr, PhD, David W.	Sioux Falls	*Rost, Michael C.	Sioux Falls	Thaemert, Bradley	Sioux Falls
Oliphant, John	Sioux Falls	Rudolph, Michael P.	Sioux Falls	Thanel, Fredric	Sioux Falls
Olson, Brad L.	Sioux Falls	Ryan, John J.	Sioux Falls	Thomas, David A.	Sioux Falls
Olson, James	Sioux Falls	Rydborg, Mitchel L.	Dell Rapids	Thompson, Vance	Sioux Falls
Olson, Michael L.	Sioux Falls	Salisbury, Steven	Sioux Falls	Tibbitts, George M.	Sioux Falls
Olson, Paul J.	Sioux Falls	Sall, John C.	Sioux Falls	Tieszen, Jerel E.	Sioux Falls
Olson, Steven P.	Sioux Falls	Salmela, Steven R.	Sioux Falls	Timmerman, Gary L.	Sioux Falls
*Opheim, Warren L.	Sioux Falls	*Sanchez, Gonzalo M.	Sioux Falls	Tiongson, Christopher	Sioux Falls
Opheim, Warren O.V.	Sioux Falls	Sanchez, Jorge D.	Sioux Falls	Tobin, Michael D.	Sioux Falls
Oppenheimer, Mark J.	Sioux Falls	Sanchez, Veronica	Sioux Falls	Travers, Henry	Sioux Falls
*Orr, Russell T.	AZ	*Sanderson, Everett W.	Sioux Falls	Trujillo, Angelina L.	Sioux Falls
Osmundson, Gregory	Sioux Falls	Santella, Robert N.	Sioux Falls	Tschetter, Loren K.	Sioux Falls
Owen, David	Sioux Falls	Sarbacker, Sarah	Sioux Falls	Tschetter, Richard T.	Sioux Falls
Owens, Jr., Leicester	Sioux Falls	Schafer, Larry W.	Sioux Falls	Tufty, Geoffrey T.	Sioux Falls
Pappas, Anastasios A.	Sioux Falls	Schechter, Marc	Sioux Falls	Tynan, Daniel G.	Sioux Falls
Parry, Rodney R.	Sioux Falls	Schellpfeffer, Donald	Sioux Falls	Uken, Patsy A.	Sioux Falls
*Pasek, Edward A.	Sioux Falls	Schroeder, Greg M.	Sioux Falls	Uthe, Craig J.	Sioux Falls
Past, Larry R.	Sioux Falls	Schroeder, Michael R.	Sioux Falls	Vaca, Anthony M.	Sioux Falls
Paul, K-Lynn	Sioux Falls	Schultz, Greg A.	Sioux Falls	Valentine, Verle	Sioux Falls
Paulson, Brad A.	Sioux Falls	*Schultz, Richard D.	Sioux Falls	Van Dis, Frederic	Sioux Falls
Pay, Douglas K.	Sioux Falls	Schultz, Thomas A.	Sioux Falls	Van Kalsbeek, Carilyn L.	Sioux Falls
Payne, Harlan A.	Sioux Falls	Segeleon, Joseph	Sioux Falls	VanDemark, Jr., Robert E.	Sioux Falls
Pederson, Kim A.	Sioux Falls	Seger, Yvonne B.	Sioux Falls	VanderWoude, John C.	Sioux Falls
Pekas, Michael W.	Sioux Falls	Seidel, Robert R.	Sioux Falls	VanderWoude, Larry B.	Sioux Falls
Pesce, Ulises	Sioux Falls	Setliff, III, Reuben C.	Sioux Falls	Vaska, Kevin J.	Sioux Falls
*Petereit, Martin F.	Sioux Falls	Shafer, Charles W.	Sioux Falls	Vincent, Martin C.	Sioux Falls
*Peters, Edward H.	Grenville	Shah, Syed Asif	Viborg	Voelker, Donald J.	Sioux Falls
Peters, Patricia A.	Sioux Falls	Shelso, John H.	Sioux Falls	Vogt, H. Bruce	Sioux Falls
Peterson, Karl G.	Sioux Falls	Shields, David A.	Sioux Falls	Vonk, Galen N.	Sioux Falls
Peterson-Henry, Terri	Sioux Falls	*Shreves, Howard B.	Sioux Falls	*Wagner, Loyd R.	Sioux Falls
Petrilli, Edmund S.	Sioux Falls	Simmons, Jerry L.	Sioux Falls	Wahl, Naomi	Sioux Falls
*Pitt-Hart, Barry T.	Sioux Falls	Siorek, Lidia	Viborg	Wallace, Caryn M.	Sioux Falls
Plaga, Bradley R.	Sioux Falls	Sittner, Larry	Sioux Falls	Wallace, James W.	Sioux Falls
Plummer, Richard L.	Sioux Falls	Slattery, Mary T.	Sioux Falls	Waltner, Lonnie L.	Bridgewater
Prouse, Bruce R.	Sioux Falls	Smith, Craig	Sioux Falls	Walton, Jerry L.	Sioux Falls
Putnam, Wesley D.	Sioux Falls	Smith, Janet E.	Sioux Falls	Watson, Mary E.	Canton
Puumala, Michael	Sioux Falls	Smith, Kendra	Sioux Falls	Watson, William J.	Sioux Falls
Quinlan, E. Denise	Sioux Falls	Smith, R. Maclean	Sioux Falls	Watt, Bruce A.	Sioux Falls
*Quinn, Robert H.	Spearfish	Smith, Sandra B.	Sioux Falls	*Wegner, Karl H.	Sioux Falls
Rabenberg, Rita M.	Sioux Falls	Smith, Jr. A. Donald	MN	Weinacht, Donna	Sioux Falls
Randall, Bradley B.	Sioux Falls	Sneed, Diane C.	Sioux Falls	Weiner, Michael F.	Sioux Falls
Raszkowski, Robert R.	Sioux Falls	Snortum, Robert A.	Sioux Falls	Weitzel, Marc	Sioux Falls
Rath, G. Daniel	Canton	Snow, Dawn M.	Sioux Falls	Wellman, Lawrence R.	Sioux Falls
Regier, Eugene R.	Canton	Solberg, Lloyd E.	Sioux Falls	Welter, Randal L.	Sioux Falls
Reiland-Smith, Juliann	Sioux Falls	Sorensen, Todd A.	Sioux Falls	Wenger, Robert S.	Sioux Falls
Renner, L. Mark	Sioux Falls	Sorensen, Arne C.	Sioux Falls	West, David R.	Sioux Falls
Reynen, Paul D.	Sioux Falls	Sorrell, Matthew	Sioux Falls	Wheeler, Kirke H.	Sioux Falls
Reynolds, James R.	Sioux Falls	Sorrell, Rodney	Sioux Falls	White, Thomas C.	Sioux Falls
Reynolds, Tommy R.	Sioux Falls	Soundy, Timothy J.	Sioux Falls	Wierda, Daryl R.	Sioux Falls
Rezkalla, Maher A.	Sioux Falls	Soye, Andrew I.	Sioux Falls	*Williams, Buck J.	AZ
Richards, George A.	Sioux Falls	Spencer, Suzannah H.	Sioux Falls	Wilson, Thomas M.	Sioux Falls
Richardson, James L.	Sioux Falls	*Stahmann, Fred S.	Sioux Falls	Wingert, Donald J.	Sioux Falls
Ridder, Glenn A.	Sioux Falls	Stampf, Mark	Sioux Falls	Wingert, Marvin E.	Garretson
Ridgway, Tim M.	Sioux Falls	Stanley, Matthew B.	Sioux Falls	Wirtz, Patricia S.	Sioux Falls
Ries, Dennis D.	Freeman	Stassen, Michael D.	Sioux Falls	Witzke, David J.	Sioux Falls
Rife, Daryl C.	Sioux Falls	*Steidl, Lester J.	Montrose	Woolhiser, Kimberly D.	Sioux Falls
Robinson, Michael	Sioux Falls	Stensland, Vernon H.	Sioux Falls	Wynkoop, Walker	Sioux Falls
Rodig, Mark D.	Sioux Falls	Stevens, Dennis C.	Sioux Falls	Zawada, Edward T.	Sioux Falls
Rodman, Peter K.	Sioux Falls	Stewart, Michael E.	Sioux Falls	Zeigler, Candace N.	Sioux Falls
Rolfsmeyer, Eric S.	Sioux Falls	Stokka, Cameron L.	Sioux Falls	Zeigler, David W.	Sioux Falls
Ronan, Kevin P.	Sioux Falls	Stoltz, C. Roger	Sioux Falls	Ziebarth, Joel A.	Sioux Falls
Rosinsky, David	Sioux Falls	Strand, David A.	Sioux Falls	Zoellner, Timothy M.	Sioux Falls
		Suga, Robert C.	Sioux Falls		

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Vice Pres, Marques Rhoades, MD

Sec/Treas, Jem Hof, MD

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Adams, Curtis M. Yankton
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Appelwick, James E. Yankton
Bangura, Luella Yankton
Barnes, David J. Yankton
Bray, Kevin Yankton
Brevik, Alan Yankton
Bubak, Gary A. Wagner
Bugbee, Jolynn A. Vermillion
Cammock, Charles Yankton
Cammock, Leona M. Yankton
Cohen, William Yankton
Collison, Patrick J. Yankton
Cook, John E. Dakota Dunes
DeJong, Brenda M. Yankton
Delaney, Thomas P. Yankton
Dendinger, William J. Vermillion
Fanta, Susan Yankton
Farrell, Curtiss D. Dakota Dunes
Farver, Max L. Yankton
Ferrell, Robert T. Yankton
*Foley, Robert J. Tyndall
Frank, John J. Yankton
Gauger, David W. Yankton
Gilmore, Howard T. Yankton
Greenwood, Kerry Yankton
*Halverson, Kenneth Yankton
Hansen, Lori A. Yankton
Heisinger, Randolph W. Yankton
*Held, Gordon R. GA
Hicks, Daniel J. Yankton
Hicks, Paula A. Yankton
Hiltunen, Scott J. Yankton

Hof, Jem J. Sioux Falls
Holtz, Carol Dakota Dunes
Holtz, Scott A. Dakota Dunes
Hubner, Jay W. Yankton
Hugo, Chris F. Vermillion
Isburg, Carroll D. Yankton
*Jameson, G. Malcolm Yankton
Jenny, David E. Yankton
Johnson, Daniel C. Yankton
Johnson, Virginia P. Vermillion
Kerr, James D. Yankton
King, Dwight Yankton
King, Patrick H. Yankton
Klopper, Coenraad Vermillion
Krohn, David C. Yankton
Larson, Dawn Yankton
Leon, Lawrence M. Yankton
Liudahl, Jeffrey J. Yankton
Mabee, Mark J. Yankton
Mannes, Bruce Yankton
McVay, Michael R. Yankton
Megard, Daniel J. Yankton
Messner, Frank D. Yankton
Mikkelsen, Beth A. Yankton
Miller, Mary K. Yankton
Milroy, Mary Yankton
Mofle, Lisa Yankton
Moosa, Yunus Dakota Dunes
Neilson, Douglas Yankton
Neubauer, Jo M. Yankton
Neumayr, Robert J. Yankton
O'Shea, Noreen Elk Point
Olson, Thomas H. Vermillion
Potas, David G. Yankton
*Radack, Morris L. Yankton

Rafferty, Kelly R. Yankton
Rand, Scott E. Vermillion
*Ranney, Brooks Yankton
*Reaney, Duane B. Yankton
*Reding, Arthur P. Sioux Falls
Rhoades, Marques E. Yankton
*Riesberg, Elsa TX
Ruggles, James G. Yankton
Saloum, Herbert A. Tyndall
*Saori, Nicasio B. Yankton
*Sattler, Theodore H. Yankton
*Sebring, Floyd U. Vermillion
Skorey, Richard J. Yankton
Somepalli, Ramesh B. Yankton
*Stanage, Willis F. Yankton
Stephenson, Daryl R. Yankton
Sternquist, John C. Yankton
Stevens, Julie C. Vermillion
Swift, Don DeRoy Yankton
Szabo, Andras Wagner
*Thompson, Robert F. Yankton
Tieszen, Myles E. Yankton
*Tuan, Chung H. Yankton
Vollstedt, Keith A. Dakota Dunes
Weber, Scott A. Tyndall
Wells, John M. Yankton
Wiggs, James W. Yankton
Willcockson, John R. Yankton
*Willcockson, Thomas H. Yankton
Withrow, David W. Yankton
Wolpert, Michael L. Dakota Dunes
Wolpert, Paul Dakota Dunes
Yelverton, Charles C. Vermillion
Young, James W. Yankton

BLACK HILLS **DISTRICT No. 9**

Pres, Jeanne Berry, MD

Sec/Treas, Cynthia Weaver, MD

Abernathie, Gordon C. Rapid City
Abraham, Prema Rapid City
Ahrlin, H. Lee Rapid City
*Ahrlin, Sr., Hollis L. Rapid City
*Akerson, Robert D. Rapid City
Allen, Bruce H. Rapid City
Allen, Richard B. Rapid City
Allen, Jr., Robert G. Rapid City
Altstiel, Terry L. Spearfish
*Anderson, A. Byford Rapid City
Anderson, Dale R. Rapid City
Anderson, Jeffrey Belle Fourche
Anderson, Wayne J. Spearfish
*Authier, Noe Rapid City
Babbitt, Nancy Spearfish
Bachwich, Dale Rapid City
Bade, Priscilla F. Rapid City
Bailey, Stephen P. Rapid City
*Bareis, Reuben J. Rapid City
Barlow, John F. Rapid City
Barrett, Kathryn A. Rapid City
Bartsch, David Rapid City
Bathurst, Robert Rapid City
Bauman, Randell E. Rapid City

Baxter, Ronald N. Rapid City
Beasley, Richard L. Rapid City
Becker, Lois J. Rapid City
Bedingfield Jr., John R. Rapid City
*Behrens, Clayton L. Rapid City
Belsaas, Rebecca L. Rapid City
Bendt, Jeffrey L. Rapid City
Benn, Steven Rapid City
*Bergeron, Dale A. Rapid City
*Berkebile, Dale E. Rapid City
Berry, Jeanne M. Rapid City
Birch, Fredric M. Rapid City
Blickensderfer, E. David Rapid City
*Bloemendaal, Robert D. Rapid City
Bochna, Gary S. Rapid City
Boddicker, Marc E. Rapid City
*Borgmeyer, Henry J. AZ
Bormes, Paul A. Rapid City
Bowman, James D. Rapid City
Boyer, David W. Rapid City
Brady, Forrest S. Spearfish
Brennan, Thomas J. Spearfish
Bright, Douglas A. Rapid City
Buehner, Marvin Rapid City

Burnap, Donald W. Rapid City
Burnett, Raymond G. Rapid City
Butterbrodt, Mark P. Porcupine
Butz, Gerald W. Rapid City
Calhoon, Stephen L. Rapid City
*Cameron, Douglas E. Rapid City
Campbell, Mark Rapid City
Carlson, Gary L. Rapid City
Carver, Richard F. Rapid City
Chang, Kevin J. Rapid City
Childers, Christi Ann Spearfish
Childers, Gary L. Spearfish
Christensen, Michael W. Rapid City
Christensen, Rochelle Rapid City
Christiansen, Gary Rapid City
Church, Ann K. Spearfish
*Cornford, Raymond C. Rapid City
*Cruse, Joseph R. NV
D'Urso, Michael P. Rapid City
Danielson, James N. Rapid City
Davies, Michael L. Fort Meade
Den Hartog, Bryan D. Rapid City
*Dewald, Allan L. Rapid City
Diamond, Kenneth Rapid City

Dick, Stephen D.	Rapid City	Herbst, John W.	Rapid City	*Munson, H. Benjamin	Rapid City
Dirks, Monte S.	Rapid City	Hercules, Costas	Rapid City	Nesbit, Dennis E.	Rapid City
Drabek, Gregg A.	Rapid City	Herlihy, John J.	Rapid City	Neu, Norman D.	Rapid City
Drummond, Ronald G.	Rapid City	Hermann, Jr., H. Thomas	Sturgis	Nitschelm, Robert D.	Custer
Drury, John H.	Rapid City	*Hermann, Sr., Harland T.	Rapid City	Nixon, Robert B.	Rapid City
Dunn, Jack	Rapid City	Herr, Victoria A.	Rapid City	Nord, Allen E.	Rapid City
Durr, Samuel J.	Rapid City	Hewitt, Gregory	Spearfish	Norlin, Rolf A.	Rapid City
Durst, Robert A.	Rapid City	*Hewitt, John M.	Rapid City	Oliver, Donald E.	Rapid City
Dykes, Jr., Thomas L.	Spearfish	Hinkson, Terry D.	Rapid City	Palumbo, Anne	Rapid City
Dzintars, Egon F.	Rapid City	Hogen, Dale A.	Newell	Papendick, Lew W.	Rapid City
*Dzintars, Paul F.	Rapid City	Hogue, Michael E.	Deadwood	Petereit, Daniel G.	Rapid City
Eaton, David	Rapid City	Holland, Edward	Rapid City	Petukoff, Marina	Rapid City
Ebbert, Larry P.	Rapid City	Holloway, James J.	Deadwood	Phipps, Nancy F.	Fort Meade
Eccarius, Scott G.	Rapid City	Honke, Sandra J.	Rapid City	Picardi, Edward J.S.	Rapid City
Eckrich, Stephen G.J.	Rapid City	Howard, Ben J.	Rapid City	Platnick, K. Barry	Rapid City
Eliason, Susan	Rapid City	Howard, William J.	Rapid City	Poling, Tamara L.	Rapid City
*Elston, John T.	Rapid City	Huot, Samuel W.	Rapid City	Porter, Richard I.	Rapid City
Elston, Michael	Rapid City	Ijem, John K.	Rapid City	Preston, Robert C.	Rapid City
Engelbrecht, James A.	Rapid City	Iverson, Gregory J.	Rapid City	Preys, Michael C.	Sturgis
Evans, David C.	Rapid City	*Jacobson, Theodore R.	Hot Springs	Propp, Daniel E.	Rapid City
Ferrell, Robert L.	Rapid City	*James, Edward H.	Rapid City	Purdy, Drew A.	Rapid City
Ferrier, L. Norman	Rapid City	Janss, Gerti J.	Rapid City	Rawson, Daniel Y.	Rapid City
Fields, Billy L.	Spearfish	Jenter, George W.	Sturgis	Raymond, Arthur J.	Hot Springs
Finkbeiner, Scott A.	Spearfish	Jerde, O. Myron	Rapid City	Raymond, Julie T.	Rapid City
Finley, Robert C.	Rapid City	Johnson, Dave R.	Rapid City	Raymond, Louis C.	Rapid City
Finley, Victoria K.	Rapid City	Johnson, David A.	Rapid City	Renka, Richard P.	Rapid City
Fisher, Anne Krier	Rapid City	Johnson, Paul S.	Rapid City	Roberts, Bob H.	Spearfish
Fisher, Frederick	Rapid City	*Johnson, Robert K.	Rapid City	Romanow, John H.	Rapid City
Ford, Troy A.	Rapid City	*Kelley, Donald H.	Deadwood	Rosario, Elmo J.	Rapid City
Fox, John R.	Rapid City	Kelts, Ph.D. K. Alan	Rapid City	Rud, James A.	Rapid City
Franz, Daniel P.	Rapid City	Knecht, John F.	Martin	*Rud, John M.	Rapid City
*Freimark, Lyle G.	Rapid City	Knutson, Roger S.	Rapid City	Russell, Richard J.	Rapid City
Friednash, Marti	Rapid City	Koch, Sherri D.	Sturgis	*Sabow, John D.	Rapid City
*Fromm, Harold E.	Rapid City	*Koren, Paul H.	Rapid City	Sandvik, David E.	Rapid City
Fromm, Stuart E.	Rapid City	*Kovarik, Richard A.	Rapid City	Sanmartin, Jorge E.	Rapid City
*Frost, Harold L.	Rapid City	Kovarik, Stephen M.	Rapid City	Sayler, Elizabeth	Deadwood
Frost, James A.	Rapid City	*Kovarik, Wenzel J.	Sturgis	Schabauer, Alexander	Rapid City
Frost, Steven	Rapid City	Kowal, Vera	Rapid City	Schad, Calvin S.	Rapid City
Frost, Timothy R.	Rapid City	Krafka, Thomas L.	Rapid City	Schleusener, Jeffrey L.	Rapid City
Ganz, William F.	Rapid City	Kullerd, Deborah Ann	Spearfish	Schleusener, Rand L.	Rapid City
Gibbs, Benjamin	Rapid City	Kunz, James A.	Rapid City	Schroeder, Mark T.	Rapid City
*Gilbert, Freeman J.	Belle Fourche	Kwan, Francis P.	Rapid City	Schutz, Robert J.	Rapid City
Gilbert, Jr., James	Rapid City	Lang, David H.	Rapid City	Sejvar, Joseph P.	Rapid City
Gill, Timothy J.	Rapid City	Lassegard, John J.	Rapid City	Seljeskog, Edward L.	Rapid City
Giuseffi, Steven A.	Spearfish	Lauer, David A.	Sturgis	Shannon, Thomas H.	Fort Meade
Glanzer, Michael L.	Belle Fourche	Lawlor, Brett	Rapid City	*Shining, H. Streeter	rRapid City
Golliher, Warren N.	Spearfish	Lembke, Jeanie M.	Rapid City	Simmons, Lynn Maxine	Rapid City
Gordon, Mark R.	Rapid City	Lewis, Charles A.	Sturgis	Simmons, Matthew E.	Rapid City
Graber, Terry M.	Custer	Liedtke, Curtis J.	Sturgis	Simonson, Mark J.	Rapid City
Graff, Randall P.	Deadwood	Little, Richard	Spearfish	Slama, David D.	Rapid City
Green, Justin	Rapid City	Looby, Jr., John E.	Rapid City	Slingsby, J. Geoffrey	Rapid City
Groeger, Thomas J.	Deadwood	*Loos, Charles M.	Rapid City	Smith, Barry A.	Spearfish
*Groote, Curtis A.	Rapid City	*Lopez, Alberto S.	Hot Springs	Spahn, Martin S.	Rapid City
Gunderson, Dale E.	Rapid City	Lord, Charles J.	Rapid City	Spangler, John G.	Rapid City
Gwinn, Charles B.	Fort Meade	Lustig, Karl A.	Spearfish	Stampe, Angela	Spearfish
Haas, Stephen N.	Rapid City	Mangulis, George J.	Philip	Statz, Michael J.	Rapid City
Habbe, Donald M.	Rapid City	Manlove, Stephen P.	Rapid City	Stearns, III, Harry C.	Spearfish
Habbe, Thomas	Rapid City	Massopust, Steven A.	Rapid City	Stenberg, Jon R.	Rapid City
Hafner, Daniel J.	Rapid City	Mathews, Michael J.	Rapid City	Stocks, Steven C.	Rapid City
Hall, Courtland J.	Rapid City	*Mattson, William J.	AZ	Stone, Kurt A.	Rapid City
Hanisch, Denise	Custer	McCafferty, James D.	Rapid City	Strand, Ray D.	Rapid City
Hanna, Chad	Rapid City	*McGuigan, Patrick M.	Rapid City	Strong, Lori A.	Rapid City
Hansen, Craig K.	Rapid City	McGuire, Michael P.	Rapid City	Sufficool, Wesley L.	Rapid City
Hanson, Charles E.	Rapid City	McLaughlin, Ruth M.	Deadwood	Sutliff, Willis C.	Rapid City
Hanson, G. Robert	Custer	McVeety, Roderick K.	Spearfish	Swisher, Lowell P.	Kadoka
*Hare, Helen Jane	Rapid City	Meyer, Larry A.	Fort Meade	Tackett, Daniel M.	Rapid City
Harlow, Mark L.	Rapid City	Millea, Roger P.	Rapid City	Teixeira, Jose M.	Rapid City
Hart, Charles E.	Rapid City	Mills, Craig	Rapid City	Teuber, Larry L.	Rapid City
Hata, Steven K.	Rapid City	Minton, Timothy P.	Rapid City	Thatcher, Ruth E.	Rapid City
Hayes, Craig R.	Spearfish	Moran, Michael J.	Rapid City	*Theissen, Hubert H.	Rapid City
Heintz, Douglas J.	Rapid City	Mortimer, Sam L.	Rapid City	Tibbles, Patrick	Rapid City

Tillan, Maria D. Rapid City
 Traub, Douglas M. Rapid City
 *Trinidad, Reuben B. CO
 Trotter, Lee D. Rapid City
 Tschetter, William R. Rapid City
 Tschida, Brian E. Rapid City
 *Van Etten, Donald D. Rapid City
 Vaughn-Whitley, Kelly Rapid City
 Voge, Kenneth A. Rapid City
 Vosler, Steven T. Spearfish

Walker, David C. Spearfish
 Waller, Jr., William C. Rapid City
 Waltman, Steven E. Rapid City
 Weaver, Cynthia A. Rapid City
 Wehrkamp, Larry L. Spearfish
 Weide, Lamont Rapid City
 Weiland, Kevin Rapid City
 Weisensee, Laurie Rapid City
 Weitzenkamp, Larry A. Martin
 Welsh, Gary L. Rapid City

Wessel, Jr., Alvin E. Rapid City
 *Westaby, Robert S. Rapid City
 Whitney, David B. Rapid City
 Wittenberg, Greg P. Rapid City
 Wojewski, Paul A. Rapid City
 Wright, Paul L. Rapid City
 Yamada, Andrew R. Rapid City
 Young, Vassilia Rapid City
 Zavitz, William R. Rapid City
 Zielike, Carol M. Rapid City

ROSEBUD

DISTRICT No. 10

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Sec/Treas, Jeffrey Pinter, MD

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 Berg, Tony L. Winner
 Carpenter, Mary S. Winner
 Clark, Andrew N. Gregory

Holland, Kristen Gregory
 Kafka, Richard L. Gregory
 Kosina, Thomas M. Winner
 Malm, John A. Gregory
 Nemer, Raymond G. Gregory

Pinter, Jeffrey D. Winner
 Schramm, Melanie A. Winner
 Skinner, Morris F. Gregory
 Tobin, Gregg M. Winner

NORTHWEST

DISTRICT No. 11

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Vice Pres, J. D. Collins, MD

Sec/Treas, Leonard M. Linde, MD

Collins, James D. Mobridge
 Head, Stephen A. Mobridge
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 Kalister, Joseph R. Mobridge

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Bailey, Stephen P.	Rapid City	Bock, Jeffrey S.	Aberdeen	Chang, Kevin J.	Rapid City
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Barlow, John F.	Rapid City	Bormes, Paul A.	Rapid City	Childers, Gary L.	Spearfish
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Davis, John B.	Sioux Falls	Feeney, Steven P.	Watertown	Golbert, Thomas M.	Sioux Falls
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Dean, Thomas M.	Wessington Spgs	Ferrell, Robert L.	Rapid City	Graber, Terry M.	Custer
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Head, Stephen A.	Mobridge	Hubner, Jay W.	Yankton	Keppen, Michael	Sioux Falls
Hearns, Valerie L.	Sioux Falls	*Huet, William G.M.	Huron	Kerr, James D.	Yankton
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Heintz, Douglas J.	Rapid City	Hurley, Christopher M.	Sioux Falls	King, Patrick H.	Yankton
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Helmbrecht, Gary D.	Sioux Falls	Hussain, Rif'at	Sioux Falls	Knowles-Smith, Peter	Buffalo Gap
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*Hermann, Sr., Harland T.	Rapid City	Jamison, Darla D.	Sioux Falls	*Kosse, Karl H.	Aberdeen
*Hermanson, John M.	Brandon	*Janavs, Visvaldis	FL	*Kovarik, Richard A.	Rapid City
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Herrin, Gerald R.	Pierre	Janss, Gerti J.	Rapid City	*Kovarik, Wenzel J.	Sturgis
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Hogen, Dale A.	Newell	Johnson, Paul S.	Rapid City		
Hogue, Michael E.	Deadwood	Johnson, Peter D.	Sioux Falls	Labesky, James W.	Sioux Falls
Hohm, Byron T.	Sioux Falls	Johnson, R.C.	Sioux Falls	*Lakstigala, Peters E.	Sioux Falls
		*Johnson, Robert K.	Rapid City	*Lampert, Jr., Arthur A.	Rapid City
				Landeen, Laurie	Sioux Falls

Landes, Fred	Aberdeen	Mathews, Michael J.	Rapid City	Nelimark, Robert A.	Sioux Falls
Landreth, Jr., Knute	Huron	Matos, Eugenio B.	Sioux Falls	Nelsen, Marcia K.	Mitchell
Lang, David H.	Rapid City	Matsuda, James.	Aberdeen	Nelson, David C.	Sioux Falls
Lang, Terry A.	Sioux Falls	*Mattson, William J.	AZ	Nelson, Earl G.	Sioux Falls
Lankhorst, Barry J.	Sioux Falls	Matushin, Clifford M.	Aberdeen	Nelson, Lawrence F.	Webster
Laput, Aleksandra M.	CO	Mayo, Chester W.P.	Aberdeen	Nelson, Patrick A.	Sioux Falls
Larsen, David A.	Sioux Falls	Mayo, Julie.	Aberdeen	Nelson, Richard A.	Sioux Falls
Larsen, Laura J.R.	Sioux Falls	Mazurczak, Miroslaw A.	Clear Lake	*Nelson, Robert E.	Sioux Falls
Larson, Dawn.	Yankton	McCafferty, James D.	Rapid City	Nemeh, Mazen.	Sioux Falls
Larson, Eric A.	Sioux Falls	McConnell, Michael.	Sioux Falls	Nemer, Raymond G.	Gregory
Larson, Gregory R.	Watertown	McCreary, Miriam.	Sioux Falls	Nesbit, Dennis E.	Rapid City
Larson, James C.	Watertown	McFee, John L.	NE	Neu, Norman D.	Rapid City
Larson, Paul M.	Pierre	McGee, James.	Aberdeen	Neubauer, Jo M.	Yankton
Lassegard, John J.	Rapid City	McGrann, James R.	Sioux Falls	Neumayr, Robert J.	Yankton
Lauer, David A.	Sturgis	McGreevy, Patrick S.	Sioux Falls	*Nice, Richard F.	Sioux Falls
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Lawler, Patrick J.	Sioux Falls	McGuire, Michael P.	Rapid City	Nielsen, James L.	Dell Rapids
Lawlor, Brett.	Rapid City	McHale, Michael.	Sioux Falls	Nipe, Hollis D.	Watertown
Lawrence, Alan A.	Watertown	McKay, Julie.	Sioux Falls	Nitschelm, Robert D.	Custer
Leadabrand, Catherine.	Watertown	McKenney, Janice.	Huron	Nixon, Robert B.	Rapid City
Lechner, Thomas.	Aberdeen	McKenzie, Matthew.	Sioux Falls	Nord, Allen E.	Rapid City
*Lee, Si Gaph.	CA	McKercher, Scott W.	Sioux Falls	Nord, Wesley J.	Sioux Falls
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Lembke, Jeanie M.	Rapid City	McLaughlin, Ruth M.	Deadwood	Nussbaum, David K.	Sioux Falls
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*Leon, Paul R.	Aberdeen	McMillin, J. Michael.	Sioux Falls		
Lewis, Charles A.	Sturgis	McQuitty, Dwayne A.	Sioux Falls	O'Brien, Charles P.	Sioux Falls
Liedtke, Curtis J.	Sturgis	McVay, Michael R.	Yankton	O'Brien, Peter J.	Sioux Falls
Likness, Clark W.	Watertown	McVeety, Roderick K.	Spearfish	O'Dea, Maureen.	VA
Lindbloom, Brent J.	Pierre	McWhirter, Robert E.	Mitchell	O'Shea, Noreen.	Elk Point
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Linde, Leonard M.	Mobridge	Meierhenry, Mary E.	Sioux Falls	Oakland, James A.	Sioux Falls
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Linn, Bernard J.	Pierre	Messner, Frank D.	Yankton	Oey, David L. T.	Sisseton
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Liudahl, Jeffrey J.	Yankton	Meyer, Philip.	Pierre	Ohrt, PhD, David W.	Sioux Falls
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Loewen, Nathan H.	Huron	Meyer, Vaughn H.	Sioux Falls	Oliver, Donald E.	Rapid City
Looby, Peter A.	Sioux Falls	Mikkelsen, Beth A.	Yankton	Olson, Brad L.	Sioux Falls
Looby, Thomas L.	Sioux Falls	Mikovsky, Peter.	Sioux Falls	Olson, James.	Sioux Falls
Looby, Jr., John E.	Rapid City	Miles, Carol.	Sioux Falls	Olson, Michael L.	Sioux Falls
*Loos, Charles M.	Rapid City	Millea, Roger P.	Rapid City	Olson, Paul J.	Sioux Falls
*Lopez, Alberto S.	Hot Springs	Miller, Charles.	Aberdeen	Olson, Steven P.	Sioux Falls
Lord, Charles J.	Rapid City	Miller, L. Patrick.	Sioux Falls	Olson, Thomas H.	Vermillion
Lorenzen, Kim M.	Mitchell	Miller, Mary K.	Yankton	*Opheim, Warren L.	Sioux Falls
Lovrien, Fred C.	Sioux Falls	Mills, Craig.	Rapid City	Opheim, Warren O.V.	Sioux Falls
Lucek, Donald W.	MN	Milroy, Mary.	Yankton	Oppenheimer, Mark J.	Sioux Falls
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Lukanova, Adriana.	Sioux Falls	Minnhaar, Guillermo T.	TX	Osmundson, Gregory.	Sioux Falls
Lundell, Caroline.	Aberdeen	Minton, Timothy P.	Rapid City	Ostby, Jason R.	Watertown
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Luzier, Thomas L.	Aberdeen	Mogen, Mark P.	Aberdeen	Owens, Matthew P.	Redfield
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MacDougall, James B.	Aberdeen	Moosa, Yunus.	Dakota Dunes	Pappas, Anastasios A.	Sioux Falls
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Malm, John A.	Gregory	Mukherjee, Asish.	Sioux Falls	*Patterson, David M.	Redfield
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Maroun, Christiane R.	Mitchell	Nagy, Michael.	Huron	Peshek, Ramona.	Watertown
Marten, Brian R.	Sioux Falls	Naughton, Gregory.	Sioux Falls	Petereit, Daniel G.	Rapid City
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Prouse, Bruce R.	Sioux Falls	Ruggles, James G.	Yankton	Slingsby, J. Geoffrey	Rapid City
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Putnam, Wesley D.	Sioux Falls	Rydborg, Mitchel L.	Dell Rapids	Smith, Craig	Sioux Falls
Puumala, Michael	Sioux Falls			Smith, Janet E.	Sioux Falls
				Smith, Kendra	Sioux Falls
Quinlan, E. Denise	Sioux Falls	*Sabow, John D.	Rapid City	Smith, R. Maclean	Sioux Falls
*Quinn, Robert H.	Spearfish	Salisbury, Steven	Sioux Falls	*Smith, Richard N.	Pierre
		Sall, John C.	Sioux Falls	Smith, Sandra B.	Sioux Falls
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Rafferty, Kelly R.	Yankton	Sample, Richard G.	Madison	Sneed, Diane C.	Sioux Falls
Rak, Richard A.	Aberdeen	*Sanchez, Gonzalo M.	Sioux Falls	Snortum, Robert A.	Sioux Falls
Ramirez, Dionisio R.	Hoven	Sanchez, Jorge D.	Sioux Falls	Snow, Dawn M.	Sioux Falls
Ramos, Manuel D.	Scotland	Sanchez, Veronica	Sioux Falls	Snyder, Wayne E.	Watertown
Ramsay, John D.	Brookings	*Sanders, Mary E.	Redfield	Solberg, Lloyd E.	Sioux Falls
Rand, Scott E.	Vermillion	*Sanderson, Everett W.	Sioux Falls	Somepalli, Ramesh B.	Yankton
Randall, Bradley B.	Sioux Falls	Sandvik, David E.	Rapid City	Sorensen, Todd A.	Sioux Falls
*Ranney, Brooks	Yankton	Sanmartin, Jorge E.	Rapid City	Sorenson, Arne C.	Sioux Falls
Rasmussen, Paul H.	Mitchell	Santella, Robert N.	Sioux Falls	Sorrell, Matthew	Sioux Falls
Raszkowski, Robert R.	Sioux Falls	*Saoi, Nicasio B.	Yankton	Sorrell, Rodney	Sioux Falls
Rath, G. Daniel	Canton	Sarbacker, Sarah	Sioux Falls	Sorrels, William F.	Mitchell
Rawson, Daniel Y.	Rapid City	*Sattler, Theodore H.	Yankton	Sorrels, Timothy J.	Sioux Falls
Raymond, Arthur J.	Hot Springs	Saxena, Kumud	Brookings	Soye, Andrew I.	Sioux Falls
Raymond, Julie T.	Rapid City	Saxena, Satish C.	Brookings	Spahn, Martin S.	Rapid City
Raymond, Louis C.	Rapid City	Sayler, Elizabeth	Deadwood	Spangler, John G.	Rapid City
*Reaney, Duane B.	Yankton	*Saylor, Jr., Howard L.	Huron	*Spears, Barbara K.	Pierre
*Reding, Arthur P.	Sioux Falls	Schabauer, Alexander	Rapid City	Spencer, Suzannah H.	Sioux Falls
Redmond, Steven T.	Aberdeen	*Schabauer, Ernest A.	Rapid City	*Stahmann, Fred S.	Sioux Falls
Redmond, Warren J.	Aberdeen	Schad, Calvin S.	Rapid City	Stampe, Angela	Spearfish
Reed, Anne Marie	Watertown	Schaefer, Larry W.	Sioux Falls	Stampfl, Mark	Sioux Falls
Reed, Richard H.	Huron	Schechter, Marc	Sioux Falls	*Stanage, Willis F.	Yankton
Regier, Eugene R.	Canton	*Scheffel, Alvin R.	IA	Stanley, Matthew B.	Sioux Falls
Reiffenberger, Dan H.	Watertown	Schellpfeffer, Donald	Sioux Falls	Stassen, Michael D.	Sioux Falls
Reiffenberger, Sarah A.	Watertown	Schleusener, Jeffrey L.	Rapid City	Statz, Michael J.	Rapid City
Reiland-Smith, Juliann	Sioux Falls	Schleusener, Rand L.	Rapid City	Stearns, III, Harry C.	Spearfish
Renka, Richard P.	Rapid City	Schramm, Melanie A.	Winner	*Steele, Granville H.	Aberdeen
Renner, L. Mark	Sioux Falls	Schroeder, Greg M.	Sioux Falls	*Steidl, Lester J.	CO
Retterath, Patrick L.	Watertown	Schroeder, Mark T.	Rapid City	Stenberg, Jon R.	Rapid City
Reynen, Mark A.	Mitchell	Schroeder, Michael R.	Sioux Falls	Stensland, Vernon H.	Sioux Falls
Reynen, Matthew	Aberdeen	Schroeder, Stephan D.	Miller	*Stensrud, Homer J.	MN
Reynen, Paul D.	Sioux Falls	Schultz, Greg A.	Sioux Falls	Stephenson, Daryl R.	Yankton
Reynen, Peter J.	Milbank	*Schultz, Richard D.	Sioux Falls	Sternquist, John C.	Yankton
Reynolds, James R.	Sioux Falls	Schultz, Thomas A.	Sioux Falls	Stevens, Dennis C.	Sioux Falls
Reynolds, Tommy R.	Sioux Falls	Schutz, Robert J.	Rapid City	Stevens, Julie C.	Vermillion
Rezkalla, Maher A.	Sioux Falls	Schwaiger, Jim	Watertown	Stewart, Michael E.	Sioux Falls
Rhoades, Marques E.	Yankton	Schwartz, John	Watertown	Stocks, Steven C.	Rapid City
Richards, George A.	Sioux Falls	*Seaman, David	Spearfish	Stokka, Cameron L.	Sioux Falls
Richardson, James L.	Sioux Falls	*Sebring, Floyd U.	Vermillion	Stoltz, C. Roger	Sioux Falls
Richardson, Michael T.	Pierre	Seeman, Terry L.	Watertown	Stone, Kurt A.	Rapid City
Ridder, Glenn A.	Sioux Falls	Segeleon, Joseph	Sioux Falls	Stout, Stephen Y.	Pierre
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Ries, Dennis D.	Freeman	Seidel, Robert R.	Sioux Falls	Strand, Ray D.	Rapid City
*Riesberg, Elsa	TX	Sejvar, Joseph P.	Rapid City	*Stransky, John J.	Watertown
Rietz, Robert R.	Brookings	Seljeskog, Edward L.	Rapid City	Strong, Lori A.	Rapid City
Rife, Daryl C.	Sioux Falls	Sergeev, Tatiana	Brookings	Stys, Adam	Clear Lake
		Setliff, III, Reuben C.	Sioux Falls		

Stys, Maria	Clear Lake	Van Dis, Frederic	Sioux Falls	Weisensee, Laurie	Rapid City
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Summerer, Robert J.	Madison	Vanadurongvan, Kanya	Milbank	Wells, John M.	Yankton
Sutliff, Willis C.	Rapid City	Vanadurongvan, Vichit	Milbank	Welsh, Gary L.	Rapid City
Suurmeyer, Robert D.	Aberdeen	VanDemark, Jr., Robert E.	Sioux Falls	Welter, Randal L.	Sioux Falls
*Swanson, Charles L.	Fort Pierre	VanderWoude, John C.	Sioux Falls	Wenger, Robert S.	Sioux Falls
Swift, Don DeRoy	Yankton	VanderWoude, Larry B.	Sioux Falls	Werth, Roger W.	Aberdeen
Swisher, Lowell P.	Kadoka	VanDeWalle, Kathleen	Aberdeen	Wessel, Jr., Alvin E.	Rapid City
Szabo, Andras	Wagner	VanErdewyk, John M.	Mitchell	West, David R.	Sioux Falls
Tackett, Daniel M.	Rapid City	VanErt, Gary P.	Chamberlain	*Westaby, Robert S.	Rapid City
Tajchman, Urszula	Sioux Falls	Vaska, Kevin J.	Sioux Falls	Wetzberger, Wayne A.	Madison
Talley, Robert C.	Sioux Falls	Vaughn-Whitley, Kelly	Rapid City	Wheeler, Jeffrey S.	Huron
Tam, Guy E.	Sioux Falls	Vener, Michael	Watertown	Wheeler, Kirke H.	Sioux Falls
Tancabelic, Jakica	Sioux Falls	Vidoloff, John C.	Aberdeen	Whitcroft, Ian	Huron
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Teixeira, Jose M.	Rapid City	Vincent, Martin C.	Sioux Falls	Whitney, David B.	Rapid City
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Teuber, Larry L.	Rapid City	Vizcarra, Dale Elizabeth	Pierre	Wierda, Daryl R.	Sioux Falls
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*Thompson, Robert F.	Yankton	*Vose, James L.	NE	Wingert, Donald J.	Sioux Falls
Thompson, Vance	Sioux Falls	Vosler, Steven T.	Spearfish	Wingert, Marvin E.	Garretson
Tibbitts, George M.	Sioux Falls	Wachs, David M.	Aberdeen	Wirtz, Patricia S.	Sioux Falls
Tibbles, Patrick	Rapid City	*Wagner, Loyd R.	Sioux Falls	Wischmeier, Curt A.	Aberdeen
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Tieszen, Myles E.	Yankton	Wahl, Naomi	Sioux Falls	Wittenberg, Greg P.	Rapid City
Tillan, Maria D.	Rapid City	Wake, Richard A.	Brookings	Witzke, David J.	Sioux Falls
Timmerman, Gary L.	Sioux Falls	Waldby, Gail E.	Huron	Wojewski, Paul A.	Rapid City
Tiongson, Christopher	Sioux Falls	Walker, David C.	Spearfish	Wolpert, Michael L.	Dakota Dunes
Tjarks, Brian D.	Mitchell	Wallace, Caryn M.	Sioux Falls	Wolpert, Paul	Dakota Dunes
Tobin, Gregg M.	Winner	Wallace, James W.	Sioux Falls	Woolhiser, Kimberly D.	Sioux Falls
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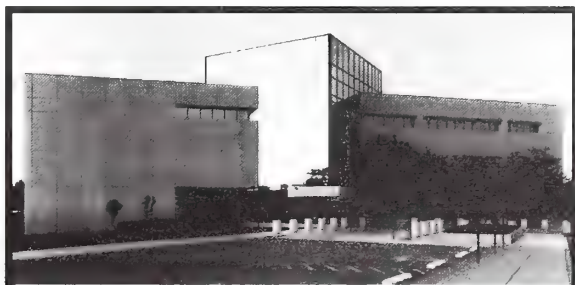


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The contact person at the *Journal* office is Kelli Achenbach, (605) 336-1965. Fax: (605) 336-0270. Email: kachenba@sdsma.org.

CME Conferences

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced; Info: Sharon Sulzbach, 347-7145.

AUGUST 2000

- Aug 15 **USDSM Audio Conference** - 12:00PM; (CST)/11:00 AM (MST); Speaker: William F. Keane MD; Topic: The HOPE Study and Clinical Practice; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Aug 15 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 15 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 16 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Aug 16 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Aug 17 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 17 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Aug 17 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Aug 17 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Aug 18 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Aug 22 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 22 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 23 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Aug 23 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: William F. Keane MD; Topic: The HOPE Study and Clinical Practice; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Aug 24 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 24 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Aug 24 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Aug 24 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Aug 24 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Aug 25 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Aug 28 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Aug 29 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Aug 29 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Aug 30 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Aug 31 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Aug 31 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

SEPTEMBER 2000

- Sept 1 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Sept 1 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Sept 1 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Sept 2 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Sept 5 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

- Sept 6 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Sept 6 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Sept 6 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Sept 6 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Sept 6 **Spine Grand Rounds** - Sponsored by the Spine Center at the Orthopedic Institute - 12:00 PM; Auditorium, Avera McKennan Hospital, third floor; Info: Mary Sand, 339-6832.
- Sept 7 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Sept 7 **Grand Rounds** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Sept 7 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Sept 7 **USDSM Audio Conference** - 12:00PM; (CST)/11:00 AM (MST); Speaker: Sharonne Northcutt Hayes MD FACC; Topic: Cardiovascular Disease in Women; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sept 8 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Sept 8 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Sept 9 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Sept 11 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Sept 11 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Sept 12 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Sept 12 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Sept 12 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Sept 12 **Breast Cancer Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital BHI - 333-5244.
- Sept 12 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Sept 13 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Sept 13 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Sept 13 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Sept 13 **Dermatopathology Conference** - 7:30 AM; SVH Pathology Conference Room 1513; Info: 333-1730.
- Sept 14 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Sept 14 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.
- Sept 14 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Sept 15 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Sept 15 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Sept 16 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Sept 19 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Sept 19 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Sept 19 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Sept 19 **USDSM Audio Conference** - 12:00PM; (CST)/11:00 AM (MST); Speaker: Sharonne Northcutt Hayes MD FACC; Topic: Cardiovascular Disease in Women; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sept 20 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Sept 20 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.

- Sept 20 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Sept 21 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Sept 21 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Sept 21 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Sept 21 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Sept 22 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Sept 22 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Sept 23 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Sept 25 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Sept 26 **Sports Medicine Grand Rounds** - Sponsored by the Sports Medicine Center at the Orthopedic Institute - 12:00 PM; Auditorium, Avera McKennan Hospital, third floor; Info: Mary Sand, 339-6832.
- Sept 26 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Sept 26 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room : Info: Diane Martian, 882-6841.
- Sept 27 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Sept 28 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Sept 28 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Sept 28 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Sept 28 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Sept 28 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Sept 29 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Sept 29 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Sept 30 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

MISCELLANEOUS

AUGUST 2000

- Aug 18-19 **Inpatient Medicine: First Annual Midwest Regional NAIP Meeting**, Mayo Clinic, Rochester, MN. Fee: \$350. 11 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Aug 24-27 **Comprehensive Internal Medicine Review and Recertification Course**, EPN Education Ctr, Washington Univ Med Ctr, St. Louis, MO. Fee: \$645 32.5 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Aug 30-Sept 2 **Surfaces in Biomaterials 2000**, Scottsdale Princess Resort, Scottsdale, AZ. AMA Category 1 credit avail. Surfaces in Biomaterials Foundation, 13355 10th Ave N, Ste 108, Minneapolis, MN 55441-5510. Phone: 763/512-9103. Fax: 763/545-0335. Website: <http://www.surfaces.org>.

SEPTEMBER 2000

- Sept 9-13 **2000 National Conference on Correctional Health Care**, Cervantes Convention Center, St. Louis, MO. Fee: \$245. AMA Category 1 credit avail. National Commission on Correctional Health Care, PO Box 11117, Chicago, IL 60611. Phone: 773/880-1460. Fax: 773-880-2424. Internet: www.ncchc.org.
- Sept 14-16 **Practical Surgical Pathology**, Leighton Auditorium, Siebens Medical Education, Mayo Clinic, Rochester, MN. Fee: \$600. 16 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Sept 15 **Early Lung Cancer: Path to Cure**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

- Sept 15-16 **Advanced Life Support in Obstetrics**, Hennepin County Medical Center, Minneapolis, MN. AMA Category 1 credit avail. HCMC Continuing Medical Education, Hennepin County Med Ctr, 701 Park Ave, Mail Code 861-B, Minneapolis, MN 55415-1829. Phone: 612/347-2075. Email: cme@hcmc
- Sept 18-21 **Managing People and Managing Care: Contemporary Management Practices in Health Care**, Oak Ridge Conference Ctr, Chaska, MN. AMA Category 1 credit avail. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Sept 21-23 **Contemporary Cardiothoracic Surgery**, EPN Education Center, Washington University School of Medicine, St. Louis, MO. Fee: \$550. 22 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Sept 21-23 **7th Annual Current Topics in Cardiothoracic Anesthesia**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Sept 22 **18th Annual North Central Heart Fall Symposium**, Sioux Falls Convention Center, Sioux Falls, SD. 7 hrs AMA Category 1 credit. North Central Heart Institute, 414 W. 18th St., Sioux Falls, SD 57105. Phone: 605/331-5394. Fax: 605/331-5314.
- Sept 22-23 **Mayo Clinic Update in Hepatology and Liver Transplantation**, Saint Paul Hotel, St. Paul, MN. Fee: \$400. 11 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Sept 28-29 **25th Annual South Dakota Perinatal Association Conference**, Rushmore Holiday Inn, Rapid City, SD. Fee: \$185. AMA Category 1 credit avail. Executive Director, SD Perinatal Association. Phone: 605/333-5210. Email: markk@siouxvalley.org.

OCTOBER 2000

- Oct 5-6 **25th Annual Symposium on Obstetrics and Gynecology**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Oct 7 **New Techniques in Urinary Incontinence and Female Urology**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Oct 7-8 **Clinical Autonomic Quantitation Workshop**, Mayo Clinic, Rochester, MN. Fee: \$475. 12 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 507/284-2509. Fax: 507/284-0532. Internet: www.mayo.edu.
- Oct 12-14 **World Foundation for Medical Studies in Female Health**, Inter-Continental Hotel, New Orleans, LA. Fee: \$450. AMA Category 1 credit avail. WFFH, 405 Main St, Port Washington, NY 11050. Phone: 516/944-7340. Fax: 516/944-8663. Email: mspinter@aol.com. Website: www.wffh.org.
- Oct 12-15 **Biology & Pathology of the Extracellular Matrix**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Oct 15-20 **Primary Care Conference**, Wyndham Rose Hall Resort & Country Club, Montego Bay, Jamaica. Fee: \$350. 18.75 hrs AMA Category 1 credit. Lorraine Byrd, Cutting Edge Educational Seminars, PO Box 5902, Vallejo, CA 94591. Phone: 707/553-9490. Fax: 707/553-9490. Email: cuttingseminars@aol.com.
- Oct 16-18 **Screening and Management for Phenylketonuria (PKU)**, Natcher Conference Center, National Institutes of Health, Bethesda, MD. AMA Category 1 credit avail. Phone: 301/592-3320. Email: pku@prospectassoc.com. Website: <http://consensus.nih.gov>.
- Oct 19-21 **Academy of Surgical Research 16th Annual Meeting**, Hyatt Regency, Cincinnati, OH. AMA Category 1 credit avail. Surfaces in Biomaterials Foundation, 13355 10th Ave N, Ste 108, Minneapolis, MN 55441-5510. Phone: 763/512-9103. Fax: 763/545-0335. Website: <http://www.surfaces.org>.

NOVEMBER 2000

- Nov 1-3 **Adjuvant Therapy for Breast Cancer**, Natcher Conference Center, National Institutes of Health, Bethesda, MD. AMA Category 1 credit avail. Phone: 301/592-3320. Email: pku@prospectassoc.com. Website: <http://consensus.nih.gov>.

- Nov 2 **Geriatric Care for the Primary Care Physician**, Leighton Auditorium, Siebens Medical Education, Mayo Clinic, Rochester, MN. Fee: \$185. 8 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 507/284-2509. Fax: 507/284-0532. Internet: www.mayo.edu.
- Nov 2-4 **Clinical Pulmonary Update**, Napa Valley, CA. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Nov 16-18 **Vestibular Labyrinth in Health and Disease (Otolaryngology)**, EPN Education Ctr, Washington University Medical Ctr, St. Louis, MO. Fee: \$445. 20 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Nov 17 **ASTRO Presentations (Radiation/Oncology)**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

*If you have any Continuing Medical Education announcements you would like to see
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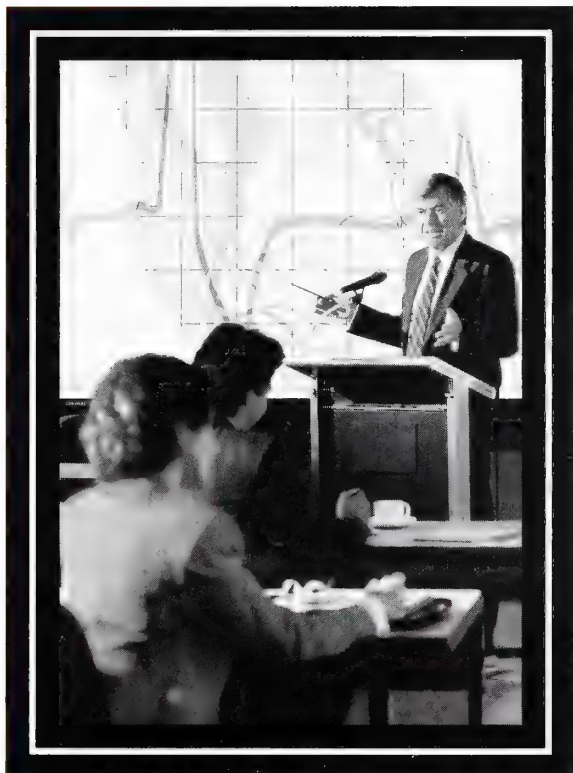
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Friday, September 22, 2000
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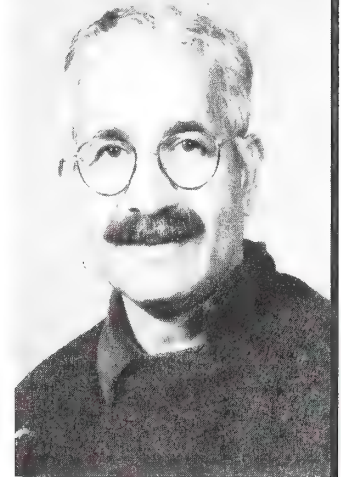
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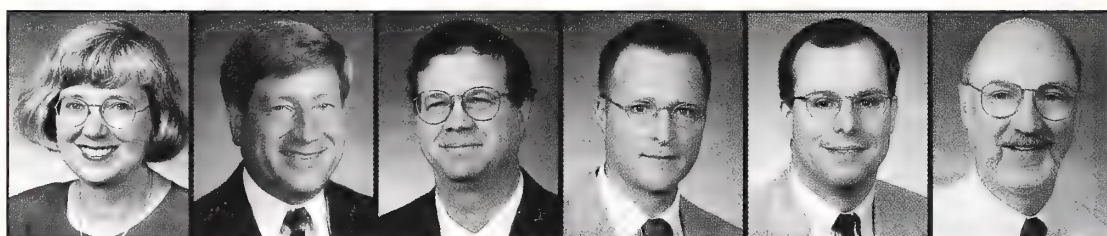
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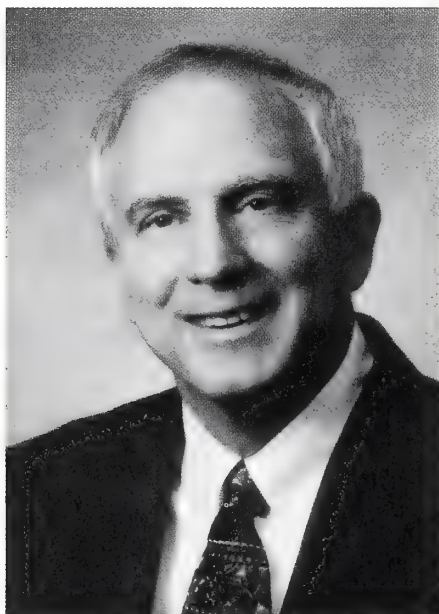
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About the Cover

The lonely windmill on the cover was photographed by
Marianne Larsen, a Sioux Falls professional photographer.

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

Women in Medicine

Dr. Mary Carpenter reminded me that September has been designated by the AMA as Women in Medicine month, and that it was time to review the topic.

Nationally, in 1970 there were 25,401 women physicians, or 7.6% of the total physician population. In 1998 there were 170,030 women physicians, or 22.8% of the population. In 1998, 37% of all residents were women and they seemed to be diversifying into more fields than the usual internal medicine (23% of the practicing physicians), pediatrics (50%), and family practice (24%). Also in 1998, 64% of obstetrics residents were women, 47% psychiatry residents were women, and 52% of dermatology residents were women.

When Dr. Carpenter looked at the numbers in South Dakota in 1995, there were 157 women physicians. That compares with 237 today, 80 more. Thus, women make

up 16% of the physician population in South Dakota. Most (54%) are internal medicine, family practice and pediatrics. Currently, 80% are members of the association, as compared to 71% in 1995.

There is a pretty obvious trend here. What are we to make of it? I think we can learn by looking back and by looking forward.

Looking back we can see that this trend has changed attitudes, albeit slowly. It probably takes a generation for society to make an appreciable change, such as the acceptance of women physicians. One 1978 woman graduate told me about the negative comments she received when she elected to go to medical school: "... no patients, too much work, never have a family ...". The topper was being accosted by a woman who accused her of stealing her son's place in medical school. A 1995 graduate told me that she heard none of that and felt well accepted in school, in training and in practice. Women practicing good medicine have made the difference in the acceptance of women physicians.

Looking forward, it is apparent that organized medicine needs to enlist the energies of women physicians. Most are under the age of 40, but many are now reaching the stage of their careers where they are ready to take on leadership positions. Women physicians face the same issues as their male counterparts and have the same responsibility of defending and promoting the profession.

Alliance News



Karen Waltman, President
South Dakota State Medical Association Alliance

At times we forget how fortunate we are to share our lives with those around us. Close interaction with our spouses, family members, lifelong friends, new acquaintances and other members of our medical family, bring additional perspective and enrichment to our lives. To nurture these relationships by reaching out often brings a renewed sense of self and an increased fulfillment and understanding of "community" at a very personal level. Taking the time to make a difference in the lives of others starts with each and everyone of us.

As members of the South Dakota State Medical Association Alliance, we are dedicated to the health of our communities. Almost everything we do helps to make a stronger foundation for the areas in which we live. Even though our days are filled with enormous personal responsibilities and commitment, we have chosen to step forward as an organization to meet some of the health and safety concerns of our society.

One of our efforts to address these concerns is to promote the Adopt-A-School Initiative throughout the state. Each of our organized districts has a goal to participate in this Initiative by promoting healthy behaviors in our schools. This project may include spending a few hours in the classroom on Wednesday, October 11, National SAVE TODAY, along with hundreds of other AMA Alliance members throughout the county, to implementing a full scale Adopt-A-School

program. Every effort lends a helping hand and improves the quality of life. This is just one example of what we are planning to accomplish this year. Other Health Promotions, AMA Foundation and legislative projects, the Toll Free South Dakota Hot Line for Family Violence, the "You are Gloved" North and South Dakota Joint Project, Alliance Newsletter and Web Site Development are also on our list. Also, we want to encourage even more interaction and partnership with the South Dakota Medical Association Council.

I would like to invite you to get involved in the Alliance district in your area. Many districts are just starting their fall programs, so it is a great time to join these dynamic individuals. All across the state we have volunteers sharing their time and talent. They are making it possible for others lives to be enhanced through Alliance membership and friendship. And, of course, the AMA Alliance offers a wide variety of resources for state and local Alliance use and implementation. We'll also get to know each other better and have the opportunity to work on projects that are of particular interest to each of us. If you would like more membership information, please call Donna Van Dis at 605/371-1517, and a local Alliance contact name in your area will be provided. We need you and welcome your Federated membership.

As it was so well stated by Mollie O. Krafka, SDSMA Alliance President (1991-1992), AMA Alliance National Board member (1995-1999), "Your life will be enriched by this experience." Mollie O. is one of my Alliance mentors and has helped numerous local, state, and national Alliance members to expand their leadership skills and knowledge of the Alliance.

The visibility and leadership role of the medical family is needed in our communities. If you are already an involved member, stay committed. You have added energy and spirit to our organization. If you are new in the area, we welcome your interest. Your participation and involvement will help us to achieve a higher profile while continuing to build the foundation for healthier and more informed generations to come. It starts with each of us reaching out to new physicians and their families, medical students, and physicians in training. If you have lost touch with someone in the medical community, please take the time to re-energize that relationship. We are all dedicated and committed to improve the health of our communities. Let's join together to further our united cause.

A handwritten signature in dark ink that reads "Karen Waltman". The signature is fluid and cursive, with a long, sweeping underline.

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A New Approach To The Diagnosis Of EHEC

Riley et al. reported a 1982 outbreak of acute bloody diarrhea secondary to ingestion of undercooked hamburger. The stools were negative for the usual enteric pathogens - salmonella, shigella, campylobacter, or yersinia, but proved to be caused by a new form of diarrheagenic *Escherichia coli* (*E. coli*) termed enterohemorrhagic *E. coli* (EHEC). Enterohemorrhagic *E. coli* produces cytotoxins called shigella-like toxins due to their similarity to the cytotoxins produced by shigella, or verotoxin (verocytotoxin) because of a demonstrable cytotoxic effect on African green monkey kidney cells (vero cells). Therefore, EHEC can also be called SLTEC (shiga-like toxin producing *E. coli*) or VTEC (verotoxin producing *E. coli*).

E. coli is part of the normal flora of the stool in almost all humans and many animals and may produce urinary tract infections or other opportunistic infections, notably if bowel integrity is compromised. However, certain less common forms of *E. coli* have acquired properties which enable them to produce gastrointestinal disease. These include: enteroaggregative *E. coli* (Eagg EC), which have a stacked brick adherence to epithelial cells; enteroinvasive *E. coli* (EIEC), which can invade the intestinal epithelium; enteropathogenic *E. coli* (EPEC), which also have an adherence mechanism to intestinal epithelial cells; enterotoxigenic *E. coli* (ETEC), which elaborate heat labile or heat stable secretory toxins and commonly cause traveler's nonbloody diarrhea; and, finally, EHEC, VTEC, or STLEC *E. coli*, which elaborate shiga-like cytotoxins and produce usually bloody diarrhea.

Since the first outbreak of EHEC, sporadic cases or outbreaks of bloody diarrhea from this organism have been associated with lunchmeat, potatoes, unpasteurized apple cider or milk, mayonnaise, drinking or swimming water, or anything which can be contaminated with bovine manure.

Enterohemorrhagic *E. coli* can cause bloody or nonbloody diarrhea and has been isolated from asymptomatic individuals. However, the most serious complication of EHEC is hemolytic uremic syndrome (HUS), in up to 10% of the cases. Hemolytic uremic syndrome is characterized by severe angiopathic hemolytic anemia with abundant schistocytes or broken up red cells on the peripheral blood smear, thrombocytopenia and life threatening acute renal failure.

It is important to make a proper diagnosis of EHEC to trace the possible source as well as for patient management. Some authorities feel antibiotic treatment is actually contraindicated because it is associated with a higher incidence of HUS than in patients who are not given antibiotics.²

The conventional diagnosis of EHEC in stool culture has relied on the fact that EHEC is often of the serotype O157 H7, and does not ferment sorbitol or is sorbitol negative. A screening plate of sorbitol Mac Conkey agar (sorbitol replacing the usual lactose), or so called SMAC agar, can be used to screen for colorless colonies which can be tested with the O157 antisera and confirmed with H7 antisera.

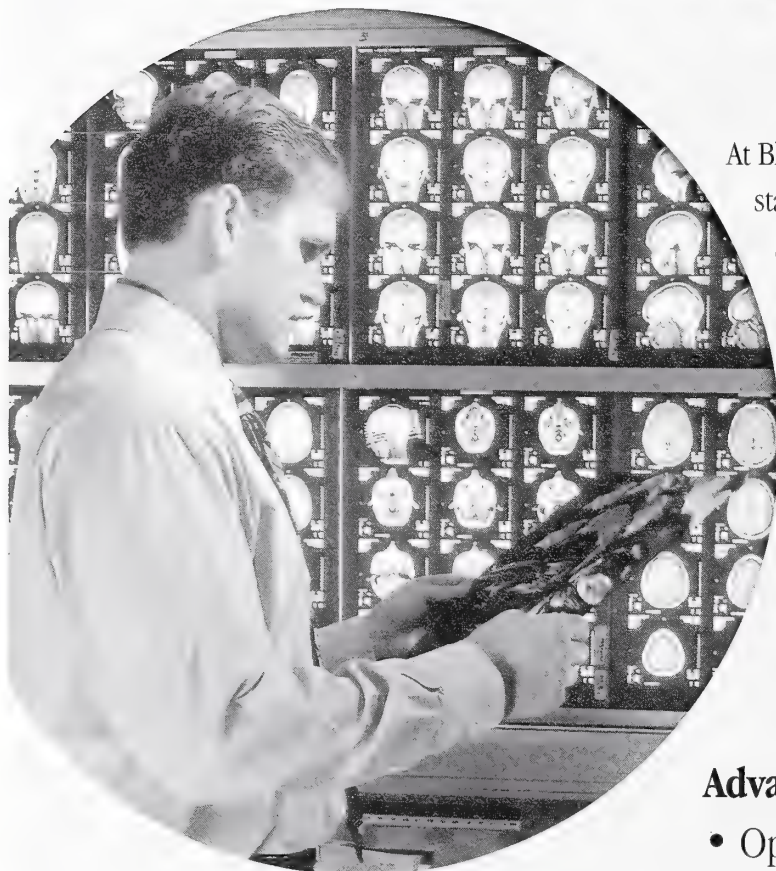
Laboratories differ on their use of this culture method. Some only culture on request by a physician whereas others utilize SMAC agar on bloody stools or rarely on all stool cultures for enteric pathogens. However, strains of EHEC are not all the O157 H7 serotype. Up to 20% nationally and 44% in a study by the University of South Dakota laboratory³ have been of other serotypes and would not be detected by the above method. Detection of the shiga-like toxins can detect these other strains of EHEC. An enzyme linked immunoassay (EIA or Elisa) is probably the practical method of detecting cytotoxin producing non O157 H7 strains. The EIA, unfortunately, also lacks sensitivity for detection of the cytotoxin producing organisms so that both tests, culture SMAC and EIA, may be necessary to increase the rate of detection of EHEC in a patient with bloody diarrhea. These tests are available through local services. The stool for EIA or culture, should be fresh (within two hours), or submitted in Cary-Blair transport media (within three days).

J.F. Barlow, MD
Editor

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Non-Seizure Uses For The Newer Anti-Epileptic Drugs

Shelly L. Pulscher, R.Ph; Hot Springs, SD

The effects of anti-epileptic drugs (AEDs) on neuronal membrane and neurotransmitter receptor functions make this class of drugs appear to be better termed neuromodulatory than anti-epileptic. Because of their effects on these areas of cells, it has become evident that they are useful for the treatment of a variety of disorders besides seizures, including neuropathic pain, psychiatric disorders and migraine headaches.^[1] It cannot be assumed that because a patient is on an AED, he is taking it for seizure control. By becoming familiar with the non-seizure uses, a more thorough evaluation may be able to be accomplished. It is not possible to address all of the uses of AEDs in detail in this column, but this overview will hopefully alert the clinician of potential uses of these AEDs. Note that there is a scarcity of randomized clinical trials and comparative studies with these drugs against standard therapies. It also cannot be assumed that these medications are interchangeable for non-seizure disorders. More randomized, clinical trials are needed to better evaluate the place of AEDs in non-seizure disorders. The newer second-generation anticonvulsants are **Gabapentin** (Neurontin®), **Lamotrigine** (Lamictal®), **Topiramate** (Topamax®), and **Tiagabine** (Gabitril®).

Neuropathic Pain

A number of treatments are available for the treatment of neuropathic pain, thus treatment differs significantly among physicians. Although a number of drugs are commonly used to treat neuropathic pain related to the peripheral nervous system, the only drug approved by the FDA is carbamazepine, which is indicated for the treatment of trigeminal and glossopharyngeal neuralgias. The tricyclic antidepressants remain first-line therapy for the treatment of painful peripheral neuropathies. Carbamazepine is the drug of choice for trigeminal neuralgia. Several clinical trials of second-generation anticonvulsants have been completed, but varying degrees of efficacy have been shown. Anticonvulsants are therefore considered second line agents and reserved for patients who do not respond to other therapies.^[2]

Psychiatric Uses

The use of the new anti-epileptic drugs for patients with psychiatric disorders is at an early stage. The published literature contains numerous anecdotal reports and open-label case series, and a small number of controlled trials of the psychiatric uses of these new AEDs. Tricyclic antidepressants have been associated with a risk of converting patients from bipolar depression to the manic or hypomanic phase or shortening cycle length.^[3] Therefore, there is a need for new therapies for patients with refractory mood disorders, particularly bipolar depression. For this reason, most of the new AEDs, including gabapentin, lamotrigine, and topiramate have been used to treat patients with mood disorders, although none of them has clearance from the FDA for any use other than the treatment of seizures. Anecdotal, open-label, and controlled data suggest that lamotrigine and gabapentin are effective for patients with refractory bipolar disorder, borderline personality disorder (lamotrigine), and anxiety disorders (gabapentin). Lamotrigine has advantages over current psychotropic treatment because of a low incidence of weight gain and sexual dysfunction. Disadvantages are the need for slow titration, risk of serious rash, and potential for drug interactions. Gabapentin has advantages over other therapies because it can be rapidly titrated, adverse effects are usually transient, and laboratory monitoring is unnecessary (except to determine renal function pretreatment, which determines dosing schedule). Additional placebo-controlled and head-to-head comparative studies are clearly needed to prove the efficacy and determine the relative potency of the new AEDs. These studies should also define the appropriate dosing ranges, differential effects on disorder subtypes, effectiveness of monotherapy versus add-on therapy, and the benefits and risks in children, women of child-bearing potential, and the elderly.

Migraine

Trials with the antiepileptic agent valproic acid have shown it efficacious as a migraine preventive therapy. This drug has an intolerable side-effect profile in many

patients, however, and should not be used by young women who may become pregnant.

Because of the positive results with valproic acid, a number of other antiepileptic medications have been studied. Controlled studies with gabapentin at doses of 900 to 1800 mg per day have shown it to be well tolerated and just as effective for headache preventive therapy as for neuropathic pain.^[4] It is not as effective as valproic acid but is better tolerated. Topiramate and tiagabine are also being studied for its use in migraine prophylaxis.

SUMMARY

Anti-epileptic drugs are being used to treat a variety of conditions. This column provides an overview of the potential uses of the new AEDs. More randomized, clinical trials are needed before considering the new AEDs as first-line therapy for non-seizure disorders, but these agents appear to be emerging as potential options for a variety of conditions.

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Recognition, Assessment And Management Of Neuroleptic Malignant Syndrome

Mujeeb Khan, MD; Debra Farver, PharmD

ABSTRACT

Neuroleptic malignant syndrome (NMS) is a potentially fatal idiosyncratic complication of neuroleptic treatment. It was first described in 1968 by Delay and Deniker,¹ and is characterized by hyperthermia, extrapyramidal signs, autonomic dysfunction and altered mentation. They reported that 0.5% to 1.0% of the patients on neuroleptic therapy developed NMS. Several retrospective studies have reported the frequency of NMS between 0.02% to 2.44%.²⁻⁵ These variations in the incidence of NMS may be due to difference in patient population, awareness and experience of clinicians, prescribing habits, different diagnostic criteria, or methodological differences in survey methods.

PATHOGENESIS

All classes of neuroleptics, even the new novel antipsychotic agents like clozapine, risperidone, and olanzapine, that have a much more benign side effect profile, have been implicated with causing NMS.⁶⁻¹³ To our knowledge, the only currently available novel antipsychotic agent not associated with NMS is quetiapine and it has been available for clinical use for only the last two years.

The ability of neuroleptics to block dopamine receptors plays a key role in the pathogenesis of NMS.¹⁴ The evidence that dopamine blockade is central to the causation of NMS comes from several sources: reports of NMS caused by non-neuroleptic dopamine blocking drugs (metoclopramide);^{15,16} treatment of NMS with dopamine agonists; and causation of NMS by dopamine depleting agents like tetrabenazine.^{14,16}

Dopamine is involved in central thermoregulatory pathways involving D2 receptors. Systemic injection of dopamine agonists like apomorphine in rats lowers body temperature, and this dopamine mediated heat loss could be blocked by dopamine antagonists like pimozide.¹⁷ The blockade of dopamine receptors in the nigrostriatal pathways is responsible for rigidity and Parkinsonian extrapyramidal side effects.¹⁴ The blockade of the dopamine receptors in the meso-cortical pathways results in mutism, akinesia, disturbed consciousness and diminished state of arousal,¹⁸ while the blockade of dopamine receptors in the hypothalamic pathways cause autonomic disturbances.¹⁴

While hypodopaminergia plays a central role in the pathogenesis of NMS, several authors have proposed the role of other neurotransmitters.¹⁹ Some have suggested that NMS is due to a relative excess of norepinephrine to dopamine.^{20,21} Clinical evidence to support this hypothesis comes from the increased risk of NMS with concomitant use of tricyclic antidepressants and neuroleptics. Some have proposed the mechanism of serotonin/dopamine imbalance and involvement of endogenous opioids in the pathogenesis of NMS.^{14,33} Lew and Tollefson²³ have postulated the role of a relative deficiency of gamma-aminobutyric acid (GABA) in NMS. There have been case reports of therapeutic effects of GABA-mimetic drugs (diazepam, lorazepam) in NMS. Gurrera²⁴ explains NMS symptomatology on the basis of dysregulated sympathetic nervous system overactivity.

RISK FACTORS

There have been reports that males are affected twice as often as females. However, Keck, et al,²⁵⁻²⁷ report that NMS affects both sexes equally. No age group is immune from developing NMS. Earlier studies had shown that a younger age group was at higher risk, but lately there has been increasing reports of NMS in psychogeriatric population. Elderly are especially vulnerable to develop NMS because there is a higher prevalence of pre-existing medical conditions, electrolyte imbalances, dehydration, poor nutritional status, agitation and organic brain syndromes, all of which are risk factors for NMS.^{14,28-31} Several studies

have suggested that NMS is associated with the following medication variables: high doses of neuroleptics, high potency drugs, depot neuroleptics (haloperidol and fluphenazine), intramuscular administration, greater rate of dosage increase, antecedent withdrawal of dopamine agonists, concomitant use of tricyclic antidepressants and lithium, reduced serum iron levels, and neurological conditions like Parkinson's disease.^{14,27-29} Other reported risk factors include a prior history of NMS, hot weather, underlying mood disorder, use of restraints, and alcoholism.^{14,27-30} The risk factors are summarized on Table 1.

Risk Factors for NMS

* Elderly
* High potency D2 blocking drugs like haloperidol
* Parental route of administration
* Increased frequency and greater rate of dosage increase
* Depot (long acting) antipsychiatric drugs
* Dehydration, poor nutritional status
* Agitation, use of restraints
* Electrolyte imbalance
* Pre-existing medical and neurological conditions
* Comorbid mood and substance abuse disorders
* Serum iron deficiency
* Concomitant use of other medications e.g. lithium, tricyclic antidepressants

Table 1

CLINICAL FEATURES

Shalev and Munitz³² found that the mean length of time between introduction of neuroleptics and the onset of NMS was about five days. The onset of NMS is often preceded by subtle autonomic and neurological signs usually not responsive to traditional pharmacological interventions. These signs include episodic tachycardia, tachypnea, diaphoresis, catatonia, akinesia, dysarthria, dysphagia, disturbed mentation, rigidity, incontinence and low-grade temperature elevation.^{14,33,34} Elevated temperature is considered to be the hallmark of NMS. The temperature usually exceeds 37.5°, and is accompanied by profuse diaphoresis. It can develop concomitantly with or shortly after the development of extrapyramidal side effects. Extreme rigidity which does not respond to conventional anticholinergics is another prominent early feature of NMS. Numerous other EPS can occur during NMS including bradykinesia, sialorrhea, tremor,

dystonia, oculogyric crisis, chorea, festinating gait, dyskinesia, and blepharospasm.

The autonomic disturbance usually presents as tachycardia, labile blood pressure, tachypnea, profuse sweating and incontinence. The patient with NMS often has a fluctuating level of consciousness, and is almost always in akinetic mute state. However, some patients may be very hyperactive.

Pearlman³⁵ reports that the mortality rate of NMS is between 4% to 22%. The most common complications of NMS are: myoglobinuric renal failure secondary to rhabdomyolysis; respiratory failure due to pulmonary edema, embolism, infection, aspiration, pneumonia, and shock. Other complications of NMS include seizures, cardiac arrhythmias, acute myocardial infarction, disseminated intravascular coagulopathy (DIC), residual muscular stiffness, persistent dystonic rigidity, and residual focal neurological deficits in patients who suffered permanent brain insult.

Laboratory Findings in NMS

* Elevated CPK
* Leucocytosis
* Arterial blood-gas abnormalities
* Electrolyte disturbance especially sodium imbalance
* Elevated SGPT, SGOT, LDH, aldolase
* EEG abnormalities (usually generalized slowing due to encephalopathy)
* Increased prothrombin time, activated partial thromboplastin time, and fibrin split products (due to DIC)

Table 2

Laboratory abnormalities^{14,36} are common in NMS. They are listed on Table 2.

DIAGNOSIS

There are no universally agreed upon diagnostic criteria for NMS. Levensen³³ requires that in order to diagnose NMS the patient must have three major manifestations (fever, rigidity and elevated CPK) or two major and four minor manifestations of NMS (tachycardia, abnormal blood pressure, tachypnea, altered consciousness, diaphoresis, and leukocytosis). Lazarus et al¹⁴ diagnostic criteria includes a history of exposure to neuroleptics seven days prior to onset (four weeks for depot medication); hyperthermia (>38°C), muscle rigidity; and three of the following: change in

mental status, tachycardia, hypertension or hypotension, tachypnea, elevated CPK, leukocytosis and metabolic acidosis. They also stipulate that the above symptoms be present concurrently and that they should not be due to any other systemic or neuropsychiatric illness.

The American Psychiatric Association has proposed the following research criteria for the diagnosis of NMS: (1) Neuroleptic agents induced fever and severe muscle rigidity; (2) Presence of two or more of the following: leucocytosis, elevated CPK, tachycardia, labile blood pressure, incontinence, tremors, dysphagia, diaphoresis, change in sensorium, and mutism; (3) The signs and symptoms of (1) and (2) are not due to other psychiatric, medical, or neurological conditions.³⁷

DIFFERENTIAL DIAGNOSIS

Differential Diagnosis of NMS	
1. Psychiatric Disorders	
	Stauder's lethal catatonia
	Hysterical rigidity
	Catatonic schizophrenia
2. CNS Disorders	
	Infections
	Neoplasms
	Parkinson's disease
	Epilepsy
	Shy-Drager's syndrome
	Neurosphillis
3. Drug Reactions	
	Malignant hyperthermia
	Acute dystonias
	PCP poisoning
	Anticholinergic delirium
	MAOI-Stimulant, MAOI-tricyclic, and MAOI-narcotic drug interactions
	Lithium toxicity
	Acute withdrawal from benzodiazepines and alcohol
4. Metabolic Disorders	
	Hyperthyroidism
	Pheochromocytoma
	Tetany
	Hepatic encephalopathy
5. Miscellaneous	
	Heat stroke
	Tetanus
	Strychnine poisoning
	Serotonin syndrome

Table 3

A wide array of conditions needs to be considered as part of the differential diagnosis. Table 3 lists those conditions. Neuroleptic Malignant Syndrome can be misdiagnosed in the elderly, non-communicative patient whose symptoms may easily be mistaken especially for the following conditions.

Stauder³⁸ in 1934 described in detail the clinical features of lethal catatonia. It consists of acute onset of severe form of psychomotor agitation lasting from days to weeks, resulting in complete physical exhaustion. Due to sustained hyperactivity, the patient develops fever, diaphoresis, tachycardia, tachypnea, dehydration, hypotension, clouded sensorium, and if untreated, to cardio-vascular collapse and death.³⁹ It differs from NMS in that there may not be a prior exposure to neuroleptics. Also, unlike NMS, there may not be any muscular rigidity.⁴⁰

Malignant hyperthermia (MH)⁴¹⁻⁴⁴ is a relatively rare disorder associated with administration of halogenated anesthetic agents and succinyl choline. Malignant hyperthermia primarily affects skeletal muscles, and clinically presents as hypertonicity, elevated CPK, hyperthermia, tachycardia, and tachypnea. It is a genetic disorder with an autosomal dominant pattern. Administration of curare can differentiate MH from NMS. Curare produces a flaccid paralysis in NMS but causes no effect in MH.

TREATMENT

Neuroleptics should be immediately discontinued in any suspected case of NMS. Medications like lithium, antidepressants, if being used concomitantly with neuroleptics, should also be discontinued. Management of NMS should be undertaken in an ICU. Aggressive supportive care aimed at combating hyperthermia, dehydration, infection, electrolyte imbalances, etc., should be undertaken. Some general guidelines are listed on Table 4. There are some specific drugs which have shown promising results in the treatment of NMS.

Bromocriptine mesylate⁴⁵⁻⁴⁹ is a dopamine agonist which is given only by mouth. The starting dose is usually 5mg TID. The dose can be increased up to 45mg to 60mg daily in divided doses. A majority of patients respond favorably within a few days. It should be continued for 10 to 14 days with symptom resolution, and tapered off gradually over at least one week.

Dantrolene Sodium⁴⁷⁻⁵² is a muscle relaxant which can be given orally and intravenously. The recommended oral dose is 100mg four times a day. For intravenous use, the recommended dose is 1mg/kg to 2mg/kg four times a day. Patients who respond favorably to it will do so within 48 hours. It should be

GUIDELINES FOR MANAGING NMS

1. Immediate discontinuation of the offending agent. In suspected cases, order Stat, CBC, CPK, Complete metabolic profile, Chest x-ray, Blood gases, UA, LP, CT scan or MRI scan of the head;
2. Aggressive supportive care of patients with NMS in a medical unit, preferably in an ICU;
3. Patient can take oral medication
 Yes: Bromocriptine (1st Choice)/Amantadine No: Dantrolene
4. If Step 3 interventions are unsuccessful, then consider ECT, benzodiazepines.
5. Once NMS has resolved, wait for at least two weeks before reinstituting neuroleptics. Note that history of NMS is not a contraindication to further neuroleptic therapy once NMS is resolved. The benefits of treating psychosis must be balanced against risk of NMS.
6. Upon rechallenge, select one of the novel antipsychiatric agents like quetiapine and clozapine because of their lower risk of causing NMS than classical antipsychiatric agents. Always start with low doses with gradual titration.
7. If the patient again develops NMS upon rechallenge with neuroleptics, and has to be on an antipsychiatric medication, then use either bromocriptine, amantadine or benzodiazepine concomitantly with the lowest effective dose of neuroleptic.
8. If Step 7 fails, then consider alternatives to neuroleptics, e.g., ECT, Tegretol, Lithium, Propranolol and Benzodiazepines.
9. Monitor very closely for weeks upon rechallenge for re-emergence of NMS, and whenever the dose is increased; discontinue neuroleptics immediately if patient develops fever, autonomic instability or rigidity. In high risk individuals it may be advisable to monitor CPK levels serially and CBC regularly.
10. Minimize the chance of NMS by trying to eliminate or resolve the various risk factors before restarting the neuroleptics (e.g. use lower potency drug, avoid depot and intramuscular administration as initial therapy, gradual increase in dose, adequate hydration, making certain that the pre-existing medical conditions are adequately treated, avoiding concomitant use of antidepressants and lithium, etc.)
11. In complex cases it is recommended to have a second opinion from a consultant to assess the risk/benefit ratios, and the patients competency to give informed consent about rechallenge.
12. It is very important to involve the patient and their family/caregiver about the risks and benefits of rechallenge, education about NMS and availability, if any, of alternate treatments, so that patients can give an informed consent. Always document very clearly in the medical records the steps you have taken to reduce the risk of liability.

Table 4

tapered off with symptom resolution. Liver function tests need to be monitored during its use due to its hepatotoxicity.

Amantadine^{47-49,53,54} is a dopamine agonist given orally in doses of 100mg to 300mg daily in divided doses. It should be continued for at least ten days, and then gradually withdrawn over a week.

Electroconvulsive Therapy (ECT) has been reportedly successful in selected cases.^{55,56} Other drugs have had some success include benzodiazepines, pancuronium and calcium channel blockers (verapamil, nifedipine), plasmapheresis, carbamazepine, and high doses of vitamin E plus vitamin B6.^{47-49,53-59}

CONCLUSION

Neuroleptic malignant syndrome is a life-threatening and potentially fatal side effect of the antipsychotic medications. It usually presents as hyperthermia, muscular rigidity, altered mentation and autonomic

dysfunction. Neuroleptic Malignant Syndrome should always be considered as a part of the differential diagnosis by the clinician in a patient who is febrile with muscular rigidity in the context of being exposed to a neuroleptic medication. The management of NMS comprises of early recognition, prompt discontinuation of the offending agent, alleviation and treatment of risk factors like infection, dehydration, poor nutrition, metabolic disturbance, low serum iron, and comorbid medical/neurological conditions. The patient should be initially treated with aggressive supportive care in an intensive care unit setting. The somatic-treatment of NMS consists of dopamine agonist agents (bromocriptine, amantadine) and dantrolene. Bromocriptine is the drug of choice among the dopaminergic agents, with amantadine reserved for patients not responding favorably or intolerable to the side effects of bromocriptine. Dantrolene should be used if the parenteral administration is needed. For intractable cases other therapies should be considered, including the use of ECT.

AUTHORS

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Abstracts

The following abstracts are from various papers presented at the meeting of the South Dakota Chapter, American College of Surgeons, held in Rapid City, in May, 2000.

Congenital Cardiac Surgery In The Adult Patient: A Nine-Year Experience

Peter Andreone, MD, FACS; Lewis Ofstein, MD, FACS; Leycester Owens, Jr., MD, FACS; James Reynolds, MD, FACS; Tommy Reynolds, MD, FACS; John Vander Woude, MD, FACS

ABSTRACT

At North Central Heart Institute from January 1991 to December 1999, 7,842 adult and pediatric cardiac procedures were performed. Of these, 66 (0.84%) were performed to correct congenital defects that presented in adult patients. There were 41 female and 25 male patients with an age range of 16 to 84 years of age. Patients were grouped in the following manner: **Group I:** Atrial Septal Defect (ASD), 39 patients. The majority (38/39) repaired with patch material (28 autologous pericardium, 10 prosthetic material). **Group II:** ASD and acquired cardiac lesions (ASD plus), 6 patients, 5 concomitant coronary revascularization (CABG) 1 mitral valve replacement (MVR). **Group III:** Patent foramen ovale (PFO), 11 patients, and the majority (9/11) discovered incidentally during surgery for acquired cardiac lesions. Two patients presented with profound hypoxia secondary to right-left shunting. **Group IV:** Aortic coarctation (coarct), six patients, all repaired with graft interposition. Three patients had previously undergone repair as children. **Group V:** Complex, 4 patients. Complications were rare: Death (PFO), transient neurologic events (ASD, ASD plus, coarct), reoperation for persistent coarctation (coarct), wound infections (ASD, coarct).

Congenital cardiac lesions rarely present in adult patients, the majority involving shunting at the atrial level (56/66). Repair can be performed with minimal risk and good overall results and should be offered to patients when the diagnosis is made.

Post-Tonsillectomy Hemorrhage

Patrick J. Collison, MD, FACS; Bret Mettler, BS

ABSTRACT

Hemorrhage is the most common significant complication of tonsillectomy, occurring sporadically

in spite of the otolaryngologist's most diligent efforts to prevent it. In this retrospective review, 430 consecutive tonsillectomy patients' charts were examined to investigate the following factors: patient age, sex, indications, past medical history, personal and family bleeding history, medications, pre-op clotting studies, surgical technique, length of stay, post-op instructions, tonsil size, and season of the year. Each operation was performed by one of two general otolaryngologists on staff, using the same technique for removal (cold dissection and snare), but with minor differences in method of hemostasis.

The bleeding rate overall was 4.0%, with .23% primary hemorrhages and 3.7% secondary. The factors which were positively correlated with post-op bleeding were: male sex ($p < .05$), late spring and summer surgical date ($p < .05$), and several particulars of surgical technique and hemostasis. These included increased length of procedure, decreased blood loss at surgery, and use of injected and topical vasoconstrictors ($p < .05$). The chi-square test was used to determine statistical significance. None of the 21 patients operated on for peritonsillar abscess had delayed post-op bleeding. The mean decrease in hemoglobin was 2.3 grams, with the lowest post-op level being 6.6 grams. The eighth post-op day was the time bleeding most frequently occurred. Two patients received transfusions, and all recovered without adverse consequence.

It appears that a controllable variable in delayed post T&A bleeding may relate to certain details of hemostatic technique. Vasoconstrictors and "field" cauterization could be associated with increased temporal and spatial application of coagulating current. While very effective in preventing primary hemorrhage, this technique will result in a deeper and more extensive zone of necrosis, with exposure of more and larger vessels when sloughing of the eschar occurs.

Eversion Carotid Endarterectomy: A Simple Technique

Benjamin F. Gibbs, MD; Rapid City, SD

ABSTRACT

Technical precision in performing carotid endarterectomy is essential to good results. Basic principles include prevention of emboli, avoidance of

residual distal flaps or retained atheroma, and closure without luminal compromise. Eversion endarterectomy satisfies these criteria. While not yet widely practiced in the United States, it is gaining acceptance. Eversion endarterectomy is simpler than traditional methods, is time efficient, and has provided excellent results in our experience of over 1500 cases.^{1,2}

While some authors advocate transection of the carotid artery as part of their eversion technique, we do not transect the artery in our method. We use a longitudinal arteriotomy limited to the wide portion of the carotid bulb which obviates patch closure in the routine case. After establishing the endarterectomy plane, the separated intima proximal to the stenosis is transected, angling the scissors to bevel the proximal intimal shelf flush with the wall of the common carotid. Downward traction is then applied to the stenotic plaque as the artery wall is gently pushed away from it, proceeding distally. This results in eversion of the external, and then the internal, carotid artery walls as the entire plaque is separated from the artery and removed with a feathered distal end point under direct vision. Distal tacking sutures are avoided. Primary closure of the arteriotomy is accomplished. Occlusion time is typically six to ten minutes using this simple method. Our technique does not burn bridges: it allows the use of a shunt when needed, or distal extension of the arteriotomy in rare difficult cases. It can be done under local, regional block, or general anesthesia. Most patients return to the floor from the recovery room, and most are discharged home the day following the operation.

In the video, we showed several cases of left carotid endarterectomy using this technique. We hope other surgeons may benefit from our experience with this simple and effective method.

REFERENCES

1. Gibbs BF, Guzzetta VJ. Carotid endarterectomy in community practice: Surgeon specific versus institutional results. *Ann of Vasc Surg*, 1989;3:307-312.
2. Gibbs BF, Guzzetta VJ, Furmanski D. Cost effective carotid endarterectomy in community practice. *Ann of Vasc Surg*, 1995;9:423-427.

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Sioux Falls, SD



A Brief History of the South Dakota Society of Obstetrics and Gynecology

Compiled and written by Brooks Ranney, MD; Yankton, SD

In September of 1951 the President of the Central Association of Obstetricians and Gynecologists, Dr. Russell J. Moe, of Duluth, Minnesota, entitled his presidential address: "The Value of Maternal Mortality Surveys." Listening in the audience were the only two board certified obstetrician/gynecologists in the state of South Dakota; Dr. Fred Stahmann, Sioux Falls; and Dr. Brooks Ranney, Yankton. Both had been trained at Northwestern University affiliated hospitals in Chicago, and they remembered the educational advantages of the Maternal Mortality Studies which had been performed under the auspices of the Chicago Board of Health. Within the next year trained obstetrician/gynecologists within South Dakota included Dr. C. Rodney Stoltz of Watertown, Dr. Val V. Kobza, of Rapid City, and Dr. Charles Stern, of Sioux Falls.

During the winter and spring of 1951-52, these five doctors conferred by letter and telephone concerning the concept of organizing a South Dakota Society of Obstetrics and Gynecology. They concluded that membership in such a society in South Dakota should include all trained specialists, plus all other doctors who had a particular interest and practice within the field. Letters were sent to more than 50 doctors; 35 responded favorably.

During the South Dakota State Medical Association meeting, a luncheon meeting was called at the Cataract Hotel on May 20th. Among the additional doctors present were William H. Saxton, Huron; Frank H. Cooley, Aberdeen; Arthur A. Lampert, Rapid City; Arthur P. Reding, Marion; Myron C. Tank, Brookings; Leonard W. Tobin,

Mitchell; Robert H. Quinn, Sioux Falls; Jack T. Cowan, Pierre; H.B. Munson, Rapid City; Granville H. Steele, Aberdeen. The doctors voted to organize a South Dakota Society of Obstetrics and Gynecology, and appointed a committee to outline the "aims" of the Society and to act as a nominating committee for initial officers.

Dr. Saxton became the first president and Dr. Kobza became the first secretary/treasurer. The original membership of the South Dakota Society of Obstetrics and Gynecology consisted of 27 doctors, soon followed by a dozen more as word passed around among those doctors who had a particular interest in the specialty. Each member paid \$10 in dues. The 1952 roster of members is listed in Table 1.

TABLE I
1952
South Dakota Society of Obstetrics and Gynecology

Merritt A. Auld	Yankton	H.B. Munson	Rapid City
F.J. Abts	Yankton	E.A. Pittinger	Aberdeen
Richard C. Baughman	Madison	Robert H. Quinn	Sioux Falls
P.R. Billingsley	Sioux Falls	Brooks Ranney	Yankton
Clifford F. Binder	Chamberlain	Arthur P. Reding	Marion
Frank H. Cooley	Aberdeen	Maurice C. Rousseau	Watertown
Jack T. Cowan	Pierre	William H. Saxton (Pres)	Huron
Walter A. Dawley	Rapid City	Howard L. Saylor, Jr.	Huron
Warren H. Fairbanks	Vermillion	Sion F. Sherrill	Belle Fourche
Harold J. Grau	Rapid City	S.B. Simon	Pierre
Roy E. Jernstrom	Rapid City	Fred S. Stahmann	Sioux Falls
John E. Johnson	Sioux Falls	Granville H. Steele	Aberdeen
Ross M. Kilgard	Watertown	Charles A. Stern	Sioux Falls
Bernard F. King	Aberdeen	C. Rodney Stoltz	Watertown
Val V. Kobza (Sec/Treas)	Rapid City	Myron C. Tank	Brookings
Arthur A. Lampert	Rapid City	Leonard W. Tobin	Mitchell
Fred D. Leigh	Huron	Paul Hohm	Huron

As chairman of the original organizational committee, Dr. Fred Stahmann suggested the following "aims" of the Society of Obstetrics and Gynecology of South Dakota:

1. To help South Dakota physicians who are especially interested in obstetrics and gynecology to become better acquainted with each other.
2. To improve the quality of obstetric and gynecologic care in the state.
3. To provide meetings where educational papers and studies may be presented.
4. To constructively study maternal mortality in our state.
5. To assist in the procurement of an obstetric/gynecological speaker at each meeting of the South Dakota State Medical Association.

Dr. Saxton obtained copies of the Constitution and By-laws of the fledgling American Academy of Obstetrics and Gynecology, and he suggested that we utilize and modify those portions which might be relevant to our needs in South Dakota.

The fall meeting of the Society was held in Huron, November 8, 1952. The Constitution and By-laws were confirmed by a vote of members present. Article II is outlined in Table II.

TABLE II
Article II: Objects and Powers

Section 1. The object of the South Dakota Society of Obstetrics and Gynecology shall be to foster and stimulate interest in obstetrics and gynecology and all aspects of the work for the welfare of women which properly come within the scope of obstetrics and gynecology.

The Society shall aid in the accomplishment of the following purposes:

- A. To establish and maintain the highest possible standards for obstetrical and gynecological teaching and postgraduate education in hospitals, district and state medical societies and in its own meetings;
- B. To perpetuate the history and best traditions of obstetrics and gynecological practice;
- C. To maintain the dignity and efficiency of obstetrical and gynecological practice in its relationship to public welfare;
- D. To constructively study maternal mortality and surgery of the female reproductive system in the State of South Dakota;
- E. To promote publications and encourage contributions to medical and scientific literature pertaining to obstetrics and gynecology from members of the organization; and
- F. To cooperate with the South Dakota Medical Society and State Board of Health whenever possible to improve maternal and child health and foster education.

None of these objects are for pecuniary profit.

The Society members voted to study every maternal or postpartum death occurring in South Dakota, using procedures similar to those used in Minnesota as a general guide. The information, thus gleaned and tabulated was to be used for educational purposes.

At this meeting, Dr. Brooks Ranney presented a patient report, "Abruptio Placenta, Blood Defibrination, Lower Nephron Syndrome, and Sequellae." Drs.

TABLE III

Of the 49 maternal deaths thus far investigated, we have had answers back from 36 doctors. On the basis of these 36 answers, the causes of death are listed as follows:

Hemorrhage	8
Toxemia	5
Infection	1
Cardiovascular & Renal Disease	5
Embolism	6
Miscellaneous	11
TOTAL	36

Also, it was estimated that:

Death was <u>directly</u> caused by pregnancy	17
Death was <u>indirectly</u> caused by pregnancy	15
Death was <u>not related</u> to pregnancy	4

Charles Stern, Howard Saylor, Fred Stahmann, and Val Kobza discussed these complicated problems. It was voted that medical articles which were presented to the South Dakota Society of Obstetrics and Gynecology would subsequently be presented to the editor of the *South Dakota Journal of Medicine* for possible publication.

The 1953 spring meeting of the Society of Obstetrics and Gynecology was held in conjunction with the June meeting of the SDSMA. Dr. Frank Cooley, Aberdeen, was elected as president of the Society. With the concurrence of the executive board, Dr. Cooley appointed the following Society members to the Statewide Maternal Mortality Study Committee; Dr. Brooks Ranney, Yankton; Dr. Fred Stahmann, Sioux Falls; and Dr. Charles Stern, Sioux Falls.

During these years, between 12 and 18 maternal deaths were occurring in South Dakota annually. From 1951 to 1953 there were 49 known maternal deaths in South Dakota. Of these, 36 records were complete enough for study by the Statewide Maternal Mortality Study Committee. During the June 1954, meeting of the South Dakota State Medical Association, a business meeting of the SD Society of Obstetrics and Gynecology was presented. Table III lists a portion of the report.

On April 2, 1955, the Society helped Dean Hard establish a symposium on obstetric/gynecologic subjects at the University of South Dakota School of Medicine in Vermillion. Thirty-nine doctors attended. Dr. Carl P. Huber, from the University of Indiana Medical School spoke on two topics; "Therapy of Carcinoma of the Uterus" and "Bleeding During the Last Trimester of Pregnancy." Dr. William B. See, from the University of Missouri Medical School discussed "Toxemias of Pregnancy," and Dr. Fred Stahmann of Sioux Falls spoke on "The Uterine Biopsy." Dr. Amos

C. Michael of the USD School of Medicine discussed "Natural History of Carcinoma of the Uterine Cervix and the Fundus."

The fall meeting of the SD Society of Obstetrics and Gynecology was held on October 15, 1955, at Huron, in conjunction with the American Academy of Family Practitioners. Our guest speaker was Dr. Leon McGoogan from the University of Nebraska, who spoke on endometriosis and vaginal discharge. The Maternal Mortality Study Committee offered a follow-up report on the causes of death. (Table IV)

TABLE IV

Briefly the causes of death were as follows:	
Cardiac arrest during early phase of Trilene anesthesia	1
Severe postpartum hemorrhage	1
Puerperal infection with septic embolism	1
Intestinal obstruction with peritonitis, secondary to old post operative adhesions and enlarging pregnant uterus	2
Third trimester hemorrhages complicated by transfusions, chronic nephritis, and followed by uremia	2
Severe toxemia complicated by spontaneous rupture of the liver	1
Pulmonary tuberculosis	2

Thereafter, the Committee began to publish data concerning maternal deaths in the *South Dakota Journal of Medicine*. Also, during subsequent years, the SD Society of Obstetrics and Gynecology continued to have two meetings per year, with guest speakers invited to the fall meetings. We continued with our Maternal Mortality Study even though there was always reluctance for physicians to release details. In order to obtain more detailed reporting, Minnesota had recently passed a law regarding the use of information derived from medical society studies. A copy of that law was obtained, and arrangements were made to have it introduced to the SD State Legislature. When it came up for legislative committee study and vote, Drs. Stern and Ranney drove to Pierre to explain to committee members the reasons for the law. The law passed the committee and both houses of government, and was signed by the governor during the winter of 1959. This law finalized the acquisition and safeguarding of detailed medical information for educational purposes. (Table V)

By 1975, the South Dakota Society of Obstetrics and Gynecology included 46 members, of whom 16 were board-certified obstetrician/gynecologists. During the early 1980s the Society was fused into the South Dakota Section of the American College of Obstetricians and Gynecologists.

The South Dakota Society of Obstetrics and Gynecology served a useful purpose as a transitional, educational society. The numbers of maternal deaths in South Dakota steadily decreased in the years following the Society's formation.

NOTE: Any physician who wishes to have a copy of the complete 60-page historical record of the South Dakota Society of Obstetrics and Gynecology may write or call: Brooks Ranney, MD; PO Box 590; Yankton, SD 57078. Phone: 605/665-3596.

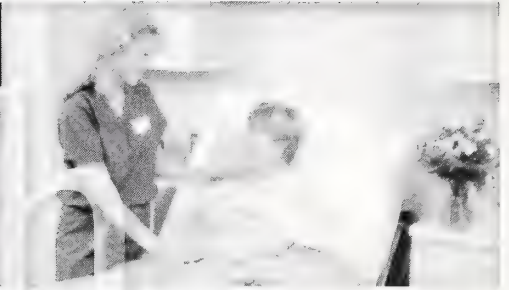
TABLE V

An act providing for the confidential character of medical studies conducted by the South Dakota State Board of Health, South Dakota State Medical Association or allied medical societies.

Be it enacted by the State Legislature of the State of South Dakota

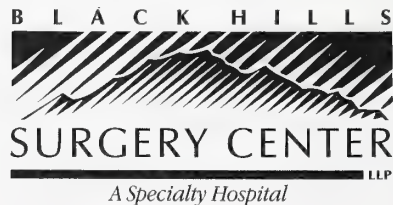
- (1) All information, interviews, reports, statements, memoranda, or other data procured by the State Board of Health, State Medical Association or allied medical societies in the course of a medical study for the purpose of reducing morbidity or mortality shall be strictly confidential and shall only be used for medical research.
- (2) Such information, records, reports, statements, notes, memoranda, or other data, shall not be admissible as evidence in any action of any kind in any court or before any tribunal, board, agency or person.
- (3) The furnishing of such information in the course of a research project to the State Board of Health, State Medical Association or allied medical societies or their authorized representatives, shall not subject any person, hospital, sanitarium, nursing or rest home, or such agency to any action for damages or other relief.
- (4) No patient, or patient's relatives, or patient's friends named in any medical study, shall be interviewed unless consent of the attending physician and surgeon is first obtained.
- (5) The disclosure of any information, records, reports, statements, notes, memoranda, or other data obtained in a medical study except that necessary for the purpose of the specific study is thereby declared a misdemeanor and punishable as such.

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This Is Your Medical Association

Dr. James V. Yackley, 81, Rapid City, died June 17, 2000, at Rapid City Regional Hospital. The long time Rapid City family physician was born in Crystal Lake, Illinois. After receiving his medical degree from Creighton University at Omaha, Nebraska, Dr. Yackley served as a major in the US Army, stationed in Virginia.

Dr. Yackley was a member of the American Medical Association and the South Dakota State Medical Association. He was active in many civic organizations in his community, as well as church ministries. Dr. Yackley was an avid golfer, hunter, rancher, and traveler. He is survived by his wife, Evelyn of Rapid City, seven children, 17 grandchildren, and five great-grandchildren.

Dr. David J. Barnes, Yankton, has completed medical education requirements to retain active membership in the American Academy of Family Physicians (AAFP). This national association of family doctors requires its members to complete a minimum of 150 hours of accredited continuing medical study every three years. Dr. Barnes, who practices with the Yankton Medical Clinic, has been an active member of the AAFP since 1993.

* * * * *

Two South Dakota physicians have been named Fellows of their respective specialty groups. **Dr. Richard M. Little**, Spearfish, was named as a Fellow of the American Academy of Orthopaedic Surgeons. The honor took place at the Academy's meeting in Orlando, Florida, earlier this year.

Watertown physician, **Dr. Daniel Flaherty**, was among the more than 1,000 initiates in the United States to become a Fellow of the American College of Obstetrics and Gynecology. Dr. Flaherty was named as a Fellow during convocation ceremonies at the college's 49th annual clinic meeting which was held in San Francisco, California.

* * * * *

Sioux Falls physician, **Dr. Archana Chatterjee** was recently accepted by The National Registry of Who's Who as a Life Member. The acceptance of Dr. Chatterjee as a Life Member is in recognition of exemplary service, both to her profession and community. Dr. Chatterjee practices with the South Dakota Children's Specialty Clinics in Sioux Falls.

Dr. B.O. Lindbloom was recently honored by the South Dakota Academy of Physician Assistants. Dr. Lindbloom received the Robert Hayes, MD, Memorial Award from the Academy on May 17 of this year. The award is based upon nominations citing the exceptional attributes of the healthcare provider. Dr. Lindbloom was recognized for his teaching and support of mid-level practitioners during his many years of family practice in central South Dakota. Dr. Lindbloom practices in Pierre with Medical Associates Clinic.

* * * * *

Dr. Jeff Hanson, Huron, recently recertified in Advanced Trauma Life Support (ATLS). Dr. Hanson, an internal medicine specialist, gained the recertification to better prepare for trauma emergencies due to injuries and burns. Dr. Hanson is certified by the American Board of Internal Medicine, and holds additional qualifications in geriatrics, gastroenterology, industrial, and sports medicine.

* * * * *

Retired Yankton physician, **Dr. Brooks Ranney**, has been chosen to be inducted into the South Dakota Hall of Fame. Over the years, Dr. Ranney has won numerous awards, and held various offices in medical and civic organizations throughout his 47-year career as an Obstetrician/Gynecologist. Dr. Ranney was a founding Fellow of the American College of Obstetricians & Gynecologists (ACOG). He also served as president of the ACOG, as well as the Central Association of Obstetricians and Gynecologists. Dr. Ranney helped establish the four-year medical school at USD, and founded a residency program with the school. Although he retired from active practice in 1995, Dr. Ranney continues to attend conferences. He and his wife spend much of their time traveling and leading tour groups to Europe and Asia. The South Dakota Hall of Fame started in 1974, and currently has approximately 450 members.

* * * * *

Dr. Samir Abu-Ghazaleh, has been named by President Clinton to the National Cancer Advisory Board. Members of the Board provide advice to the president, to the secretary of the Department of Human Services, and to the director of the National Cancer Institute (NCI) in the area of activities and policies carried out by the NCI. Dr. Abu-Ghazaleh is a gynecologic oncologist at the Avera Cancer Institute in Sioux Falls.

Dr. A.J. Tieszen was recently recognized for his longevity in the healthcare profession. South Dakota Urban Indian Health, Inc., honored Dr. Tieszen for his 21 years of service to SDUIH.

* * * * *

New physicians are being welcomed to the Vermillion area. **Dr. Vicki Walker**, **Dr. Mary Jo Olson**, and **Dr. Matt Krell** have begun their South Dakota medical practices. Drs. Walker and Olson will be practicing family medicine with the Sioux Valley Vermillion Clinic and the Elk Point Clinic, while Dr. Krell, a pediatrician, will practice with the Vermillion Medical Clinic.

West River Neurosurgery & Spine, PC, welcomes **Dr. Steven Schwartz** to its clinic. Dr. Schwartz specializes in spine surgery, endoscopic, minimally invasive procedures, neurovascular surgery, and general neurosurgery.

* * * * *

Dr. Oleg Georgiev recently joined Avera Queen of Peace Health Services in Mitchell. Dr. Georgiev specializes in internal medicine, nephrology, and critical care. He joins Jensen Clinic in Mitchell.

* * * * *

Hospice of the Hills honored **Dr. Al Wessel, Jr.**, with the South Dakota Hospice Organization Physician Meritorious Service Award. Dr. Wessel received the award recognizing his patient advocacy and care. The nomination pointed out Dr. Wessel's availability to Hospice nurses for symptom control consultations and answering questions related to medication and care of hospice patients.

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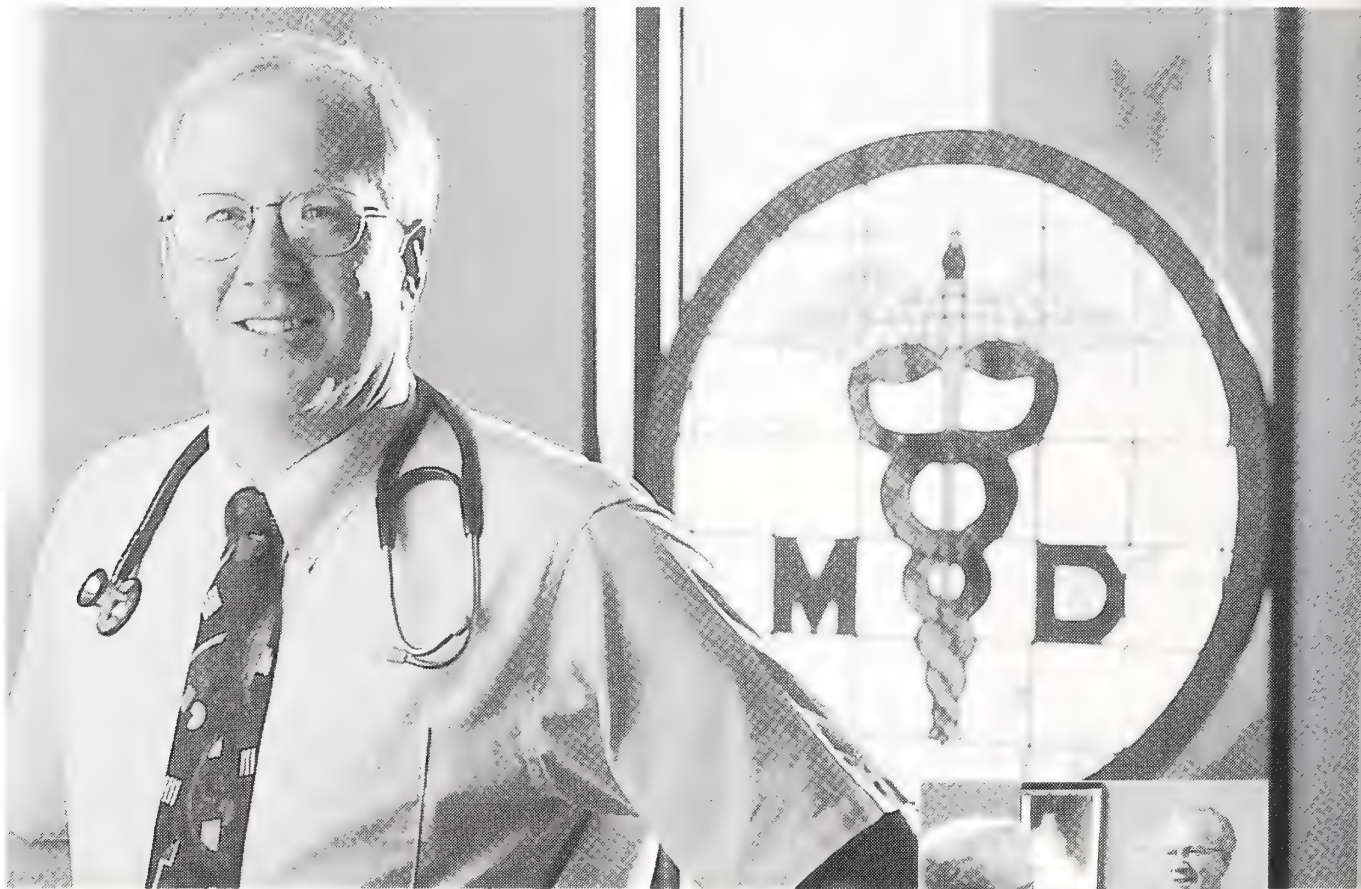
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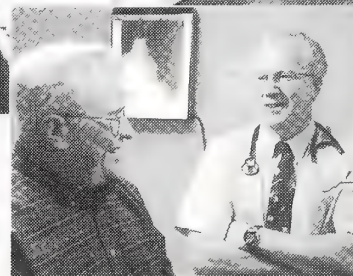
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Clinical Topic	Quality Indicator	SD Rate	SD Rank*
Acute Myocardial Infarction	Early administration of aspirin	83.5%	30th
	Aspirin at discharge	87.6%	14th
	Early administration of beta blocker	69.0%	14th
	Beta blocker at discharge	70.9%	29th
	ACEI at discharge for low LVEF	67.2%	37th
	Smoking cessation counseling	37.0%	35th
	Time to angioplasty or reperfusion	50.0 min.	6th
Heart Failure	Appropriate use of ACEI at discharge	71.7%	51st
Atrial Fib/ Stroke/TIA	Warfarin at discharge	60.8%	6th
	Antithrombotic at discharge	83.8%	21st
	Avoidance of sublingual nifedipine	89.8%	47th
Diabetes	Annual HbA1c	78.2%	11th
	Biennial eye exam	74.7%	14th
	Biennial lipid profile	60.4%	13th
Breast Cancer	Female Medicare beneficiaries age 52-69 with a mammogram in 2-year period	57.1%	20th
Pneumonia	Timely administration of antibiotic	91.1%	3rd
	Appropriate initial antibiotic administered	84.5%	5th
	Blood culture collected prior to antibiotics	83.8%	24th
	Inpatient influenza vaccination or screening	14.0%	28th
	Inpatient pneumococcal vaccination or screening	13.9%	20th
	Statewide influenza vaccination rate	65.6%	29th
	Statewide pneumococcal vaccination rate	40.6%	41st

*State rank is based on a total of 52 U.S. States and Territories.

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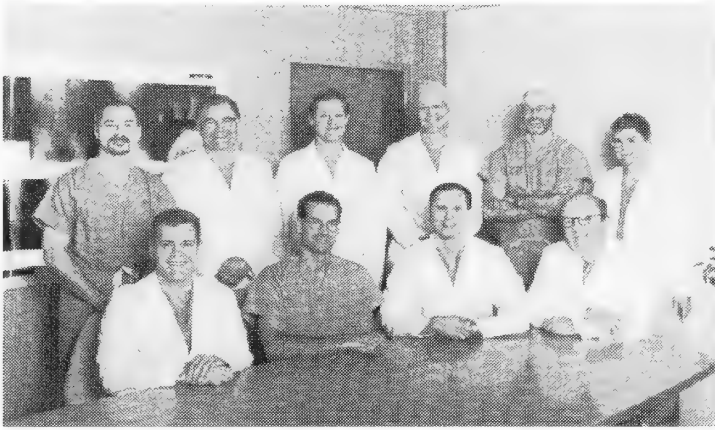


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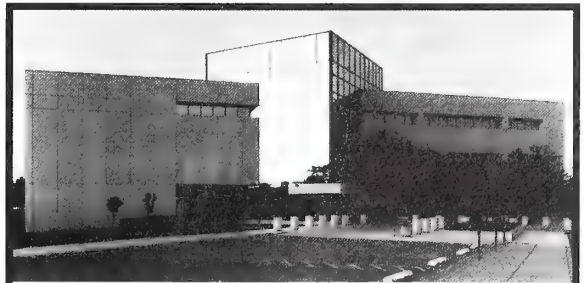


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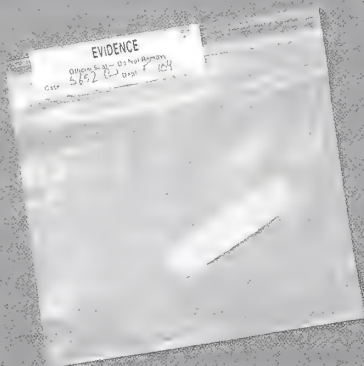


exhibit A:

Adhesive bandage, which plaintiff alleges defendant pulled rapidly from skin, violently tearing three hairs from plaintiff's arm, which resulted in severe lacerations, trauma, disfigurement, chronic debilitating pain and permanent psychological damage.

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CME Conferences

CME Conferences being held on a regular basis at various health care facilities throughout the state of South Dakota. (1 hour AMA Category I credit available unless otherwise specified.)

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced; Info: Sharon Sulzbach, 347-7145.

SEPTEMBER 2000

- Sep 15 **Physicians Continuing Education** - 7:30:00 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Sep 15 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Sep 16 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Sep 19 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Sep 19 **Endorama (Endocrinology Conference)** - 7:30:00 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Sep 19 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Sharonne Northcutt Hayes MD FACC; Topic: Cardiovascular Disease in Women; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sep 19 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Sep 19 **USDSM Audio Conference** - 12:00PM (CST)/11:00AM (MST); Speaker: Sharonne Northcutt Hayes MD FACC; Topic: Cardiovascular Disease in Women; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sep 20 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Sep 20 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Sep 20 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Sep 21 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Sep 21 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Sep 21 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Sep 21 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Sep 22 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Sep 22 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Sep 23 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Sep 25 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Sep 26 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Sep 26 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Sep 26 **Sports Medicine Grand Rounds - Sponsored by the Sports Medicine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Sep 27 **USDSM Audio Conference** - 12:30 PM; (CST)/11:30 AM (MST); Speaker: Terry Mamounas, MD, MPH, FACS; Topic: The Role of Aromatase Inactivation in the Hormonal Treatment of Breast Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sep 27 **USDSM Audio Conference** - 2:30 PM; (CST)/1:30 PM (MST); Speaker: Terry Mamounas, MD, MPH, FACS; Topic: The Role of Aromatase Inactivation in the Hormonal Treatment of Breast Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sep 27 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Sep 28 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Sep 28 **USDSM Audio Conference** - 12:30 AM (CST)/10:30 AM (MST); Speaker: Terry Mamounas, MD, MPH, FACS; Topic: The Role of Aromatase Inactivation in the Hormonal Treatment of Breast Cancer; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Sep 28 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Sep 28 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Sep 28 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Sep 28 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.

- Sep 29 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Sep 29 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Sep 30 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

OCTOBER 2000

- Oct 3 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 3 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Oct 4 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Oct 4 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Oct 4 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Oct 4 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Oct 4 **Spine Grand Rounds - Sponsored by the Spine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand, 339-6832.
- Oct 5 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Oct 5 **Grand Rounds** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Oct 5 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Oct 6 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Oct 6 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Oct 6 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor 357-1585.
- Oct 7 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Oct 9 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Oct 9 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Oct 10 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Oct 10 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Oct 10 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 11 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Oct 11 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Oct 11 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Oct 12 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Oct 12 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.
- Oct 12 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Oct 12 **ACLS Renewal** - 1:00 PM; Avera McKennan Hospital Auditorium; Info: Kathy Miles, Avera McKennan 322-8950.
- Oct 12 **USDSM Audio Conference** - 11:30 AM (CST)/10:30 AM (MST); Speaker: Stefan Gluck, MD, PhD; Topic: Breast Cancer Adjuvant Treatment – A Global Perspective; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 12 **USDSM Audio Conference** - 1:30 PM (CST)/12:30 PM (MST); Speaker: Stefan Gluck, MD, PhD; Topic: Breast Cancer Adjuvant Treatment – A Global Perspective; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 13 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Oct 13 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Oct 14 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Oct 17 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 17 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Oct 17 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Oct 18 **USDSM Audio Conference** - 12:00 PM (CST)/11:00 AM (MST); Speaker: Harold Lloyd Kennedy MD MPH; Topic: Beta Blocker Treatment in Chronic Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 18 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

- Oct 18 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Oct 18 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Oct 18 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Harold Lloyd Kennedy MD MPH; Topic: Beta Blocker Treatment in Chronic Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
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- Oct 19 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Oct 19 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
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- Oct 20 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor 357-1585.
- Oct 21 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
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- Oct 23 **Sports Medicine Grand Rounds - Sponsored by the Sports Medicine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Oct 24 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 24 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Oct 25 **USDSM Audio Conference** - 12:00 PM (CST)/11:00 AM (MST); Speaker: Harold Lloyd Kennedy MD MPH; Topic: Beta Blocker Treatment in Chronic Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 25 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Oct 25 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Oct 26 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Oct 26 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Oct 26 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Oct 26 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
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- Oct 27 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Oct 27 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Oct 28 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Oct 31 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 31 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

MISCELLANEOUS

SEPTEMBER 2000

- Sept 18-21 **Managing People and Managing Care**, Oak Ridge Conference Ctr, Chaska, MN. Fee: \$1,900. 33 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 First St, SW, Rochester, MN 55902. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Sept 19-20 **3rd National Conference on Genetics and Public Health: Connecting Research, Education, Practice, & Community**, University of Michigan, Ann Arbor, MI. Fee: \$300. AMA Category 1 credit avail. Genetics Conf Registration Coordinator, 6220 Montrose Rd, Rockville, MD 20852. Phone: 301/984-9450. Fax: 301/984-9441. Internet: www.astho.org.
- Sept 21-23 **Contemporary Cardiothoracic Surgery**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Sept 21-23 **Sixth Annual Current Topics in Cardiothoracic Anesthesia**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S

Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

Sept 22 **18th Annual North Central Heart Fall Symposium**, Sioux Falls Convention Center, Sioux Falls, SD. 7 hrs AMA Category 1 credit. North Central Heart Institute, 414 W. 18th St., Sioux Falls, SD 57105. Phone: 605/331-5394. Fax: 605/331-5314.

Sept 22-23 **Mayo Clinic Update in Hepatology and Liver Transplantation**, Saint Paul Hotel, St. Paul, MN. Fee: \$400. 11 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.

Sept 28-29 **25th Annual South Dakota Perinatal Association Conference**, Rushmore Holiday Inn, Rapid City, SD. Fee: \$185. AMA Category 1 credit avail. Executive Director, SD Perinatal Association. Phone: 605/333-5210. Email: markk@siouxvalley.org.

OCTOBER 2000

Oct 5-6 **Children's Healthcare Symposium**, Sioux Valley Hospital Auditorium, Sioux Falls, SD. AMA Category 1 credit avail. Zoe Angerhofer, Sioux Valley Hospital, 1100 S Euclid Ave, Sioux Falls, SD 57117. Phone: 605/357-7650.

Oct 5-6 **25th Annual Symposium on Obstetrics and Gynecology**, Washington University School of Medicine, St. Louis, MO. Fee: \$275. 13 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

Oct 7 **New Techniques in Urinary Incontinence and Female Urology**, Washington University School of Medicine, St. Louis, MO. Fee: \$250. 8 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

Oct 7-8 **Clinical Autonomic Quantitation Workshop**, Mayo Clinic, Rochester, MN. Fee: \$475. 12 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 507/284-2509. Fax: 507/284-0532. Internet: www.mayo.edu.

Oct 12-15 **Biology & Pathology of the Extracellular Matrix**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

Oct 16-18 **Screening and Management for Phenylketonuria (PKU)**, Natcher Conference Center, National Institutes of Health, Bethesda, MD. AMA Category 1 credit avail. Phone: 301/592-3320. Email: pku@prospectassoc.com. Website: <http://consensus.nih.gov>.

Oct 19-21 **Academy of Surgical Research 16th Annual Meeting**, Hyatt Regency, Cincinnati, OH. AMA Category 1 credit avail. Surfaces in Biomaterials Foundation, 13355 10th Ave N, Ste 108, Minneapolis, MN 55441-5510. Phone: 763/512-9103. Fax: 763/545-0335. Website: <http://www.surfaces.org>.

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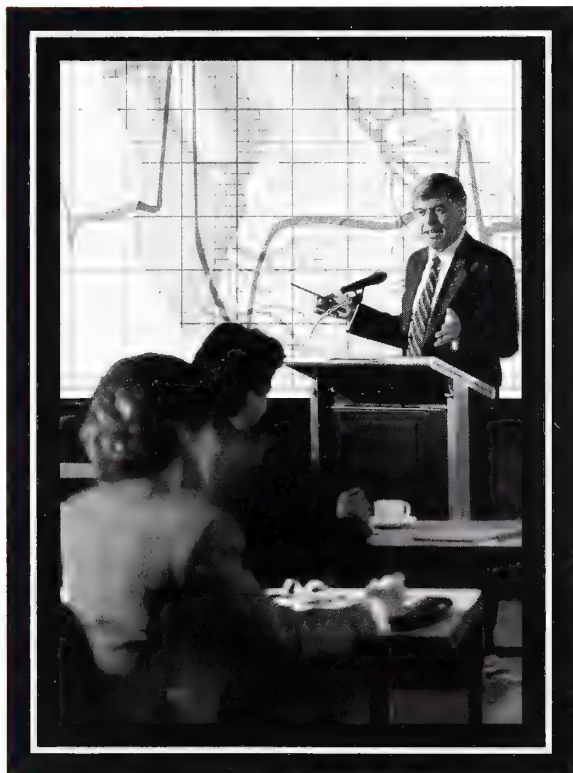
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18th Annual FALL SYMPOSIUM



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Technology, procedures and philosophies constantly change. For health care professionals, it's vital to remain informed about the latest innovations. At North Central Heart Institute, we're committed to providing that information for you. We're pleased to present our:

18th Annual Fall Symposium
Friday, September 22, 2000
Sioux Falls Convention Center

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Call North Central Heart Institute at 605-339-6776 for more information.



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they find STRENGTH and COMFORT in knowing GOD'S ABIDING LOVE for them,
despite their experience of chaos."*

*Excerpt from a pastoral letter on healthcare
by Joseph Cardinal Bernardin, former Archbishop of Chicago*

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SOUTH DAKOTA

October 2000
Volume 53 Number 10

JOURNAL of MEDICINE

Published monthly by the South Dakota State Medical Association



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WELCOME

JAMES MARESH, MD

Dr. James E. Maresch has joined Surgical Associates. He is a Sioux Falls, SD, native who returns to us from Evansville, IN, where he was in private practice for 12 years. Dr. Maresch is a retired Colonel of the United States Air Force. He was a past Chief of Surgery at Wilford Hall Medical Center, an 1,100 bed facility. Dr.

Maresch has also served as Residency Program Director at Lackland Air Force Base in Texas.

To schedule an appointment with Dr. Maresch, call **357-3840**.



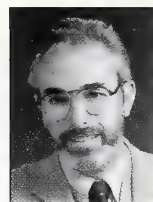
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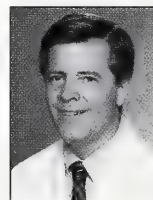
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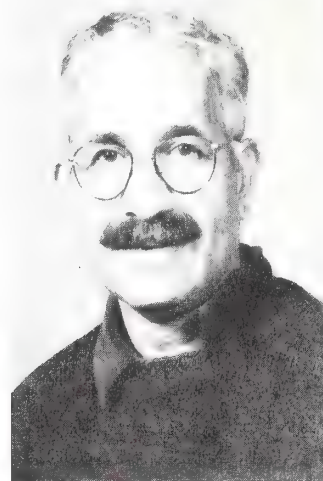
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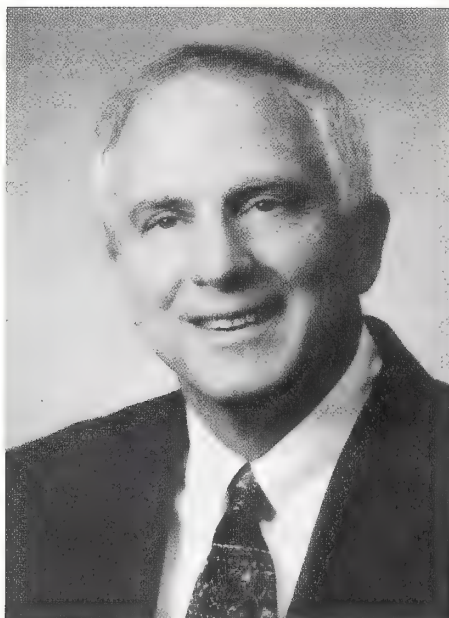
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About the Cover

The barren tree with its branches reaching toward the sky on the cover was photographed by Dr. Younes Bakr, formerly of Brandon, SD.

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

As you read this, the election season will be in full swing and I hope that you are fully engaged in the process. There are still physicians who believe that participation in the political process is somehow inappropriate for a caring profession. Well, they are wrong. Health care is an issue that is as politicized as education and social security. Each year there are different issues: sometimes tort reforms, sometimes a patient bill of rights and sometimes a provider tax. Even the practice of medicine is grist for the political mill. Each year there are more and more scope of practice issues debated at the legislature. Our mission is to protect the health of the public and this means that we need to be involved in politics.

Every physician needs to do two things. That is all the Association asks of you - two things. One is to become a member of the South Dakota Medical Political Action Committee (SDMedPAC) by donating to the fund drive. There are only 3000 physicians and spouses in South Dakota, so numbers are going to have to be supplemented with political donations. Giving to individual candidates is not enough because organized medicine may have a crucial race at the far end of the state. The other is to attend the district meeting to which the legislators are invited. This will show them that

their physician constituents are interested. Part of our difficulty is simply cultural. A few legislators apparently vote against us on issues simply because they have an unfavorable stereotype of physicians. Most South Dakota physicians are Midwesterners who share the same worldview as other South Dakotans, and we should be able to interact amiably with the legislators.

More needs to be done. We need interested physicians to be involved in their local races and to keep lines of communication open with their local representatives. Dr. Scott Eccarius, a Rapid City ophthalmologist and a member of the South Dakota House of Representatives, spoke to the House of Delegates in June and made it clear that we need to have more of a physical presence in Pierre during the session. We need more physicians to testify before committees, and we need more physicians to lobby in Pierre. One idea has been to have a cadre of physicians willing to spend three days each in Pierre so that they will be available to testify before legislative committees. These doctors would also serve as a contact and a resource for physicians who come for a day to testify or to visit a representative. If you are willing to make a commitment for three days, or for a one-day visit during the session, please call the SDSMA administrative offices at (605) 336-1965.

Political consultant Michael Dunn has told us that there are only two groups of people in the political process - players and victims. Players are people who donate to the candidates, support the PAC, open a communication channel to their legislators, and testify before committees. Victims are the people who do not do these things. We owe it to the patients of South Dakota to be players in the political process.

Alliance News



**Karen Waltman, President
South Dakota State Medical Association Alliance**

The South Dakota State Medical Association Alliance kicks off its sixth annual "SAVE Today" on Wednesday, October 11. In partnership with the American Medical Association Alliance (AMAA), the volunteer arm of the American Medical Association (AMA), South Dakota will be implementing the "SAVE" or, "Stop America's Violence Everywhere," initiative to raise awareness of violence among children and teens. South Dakota is one of 45 state Alliances - AMAA affiliates - that participate in community-based "SAVE" programs which foster non-violent methods of coping and behavior.

In 1995, the AMA dedicated the second Wednesday of every October as "SAVE Today" - a day to reach out to local schools and civic organizations with interactive, educational activities that reinforce the non-violent message. This year's "SAVE Today" project focuses on the message, "I Can Stop Violence." The program incorporates a two-sided puzzle that features youth violence statistics. In addition, the AMA provides materials for children, teachers and community leaders to facilitate classroom discussions on issues related to violence.

The alarming facts about youth violence permeate all segments of society.

- One in seven school children is either a bully or the victim of a bully, one of the distinct warning signs of youth violence. (Bullying Fact Sheet, Barsche, G. and Moore, B.; 1992; In Behavioral Interventions: Creating a Safe Environment in Our Schools; National Association of School Psychologists; 1998.)
- Teenage boys in all racial and ethnic groups are more likely to die from gunshot wounds than from all natural causes combined. (Combating Violence and Delinquency: The National Juvenile Justice Action Plan; Coordination Council on Juvenile Justice and Delinquency Prevention; U.S Department of Justice; March 1996.)
- Between 1994 and 1997, the number of youth under the age of 18 in the adult prison system rose 35%. (Juvenile Offenders and Victims: 1999 National Report; Office of Juvenile Justice and Delinquency Prevention; U.S. Department of Justice. September 1999.)

"This year's 'I Can Stop Violence' campaign is the foundation of an effective outreach program that teaches children the steps in identifying conflicts, communicating feelings appropriately and resolving situations through non-violent means," said Susan Paddock, president of the AMA. "We are delighted to partner with schools and civic organizations to bring awareness of violence prevention to the forefront of education."

This year, AMAA volunteers in communities nationwide are contributing their time and resources to the "SAVE Today" effort including Alliance members in North and South Dakota. Alliance members from these two states will be visiting Standing Rock Indian Reservation with the "You Are Gloved" Program. Once again, they will be visiting the Reservation with over 600 pairs of gloves for the students, and "Hands are Not for Hitting" activity books for elementary children. In addition, the Alliance will be including a new "Solving the Violence Puzzle" activity for grades 4 - 7. The two-sided, 30 piece puzzle opens a dialogue about violence with 9 - 12 year olds and asks them to make a personal pledge to decrease violence in their community. Students and Alliance volunteers will discuss several ideas of ways to prevent violence and

demonstrate conflict resolution skills in their schools and homes. The AMAA will distribute nearly 50,000 puzzles to over 200 communities as part of a nationwide campaign against violence.

Additionally, counties in South Dakota are participating in the SAVE Schools from Violence through the Adopt A School program and will continue to promote the 1-800-430 SAFE Toll Free South Dakota Hot Line for family violence under the SAVE umbrella. For more information on Alliance health projects, call Cathie Calhoun, SDSMAA Health Chairman at 605-348-5319 or visit the AMAA website at www.ama-assn.org/alliance.



Karen Waltman

*Special thanks to the AMAA and Jenny Buell, AMAA Field Director and North Dakota Alliance member for their editorial contributions.



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Before you were listening, before most of us were paying much heed to such matters, deceptions were a regular part of medicine. It was common not to reveal the presence of cancer to a dying patient. Informed consent was implied by the patient's dutiful adherence to a doctor's learned recommendations, while patient inquiry into options and alternatives was discouraged. On rare occasions egregious deceit was tolerated under the guise of ordinary research. Patients in the Tuskegee experiment were monitored for many years but not offered treatment for their syphilis. And of course, there were instances when placebos were used to essentially trick patients into getting better. In this seemingly remote past, if a patient's pain or other symptomatology didn't seem consistent with the perceived organic diagnosis, a "sugar pill" could be employed to assess the patient's response. If there was improvement, this was deemed evidence that the patient was faking an ailment or was the victim of so-called psychosomatic illness.

Today, we know better, or at least we hope we do. Experts generally recognize that virtually any treatment has some potential placebo effect for an individual. I have frequently heard quoted the adage that 20% of people with symptoms will benefit from a placebo. Other studies have suggested that up to 35% of patients with painful conditions experience some relief through placebo.¹ Thus, most practicing physicians now understand that if a patient is given an inert substance that is represented as treatment, and the patient shows improvement, the beneficial effect noted does not necessarily mean the patient lacks organic disease. A current text on pain notes: "If about one-third of patients who have obvious physical stimuli for pain (abdominal surgery) report pain relief after a placebo injection, clearly placebos cannot be used to diagnosis malingering, psychogenic pain, or any psychologic problem."² This contemporary understanding of placebo effect, of course, throws into disarray some previously accepted adages of clinical care.

On occasion, a physician might not even intend a placebo effect and subsequently discover the presence of one. Some years ago, I did an EEG on a patient who had somewhat bizarre spells. When I saw her a week later, she assured me that the EEG "treatment" had been totally successful and that her spells had abated. In a

similar vein, I have occasionally encountered patients who felt that nerve conduction studies stimulated their nerves and relieved their symptoms. In such instances, a clinician might well ponder whether there is an ethical responsibility to undo an unintended placebo effect by insisting on brutal honesty or whether simply listening to the patient's testimonial without comment is more prudent.

Recently, the nursing staff of a local hospital questioned the practice of deliberate deception by using a placebo. The patient in question was apparently complaining of pain that seemed to her physician to be out of proportion to her disease pathology. Her physician ordered a placebo and the nursing staff felt great uneasiness about representing a "sugar pill" as some form of valid treatment. The nursing staff brought the issue to the institutional ethics committee. It was the consensus of that group that the nursing concerns about placebo were valid and appropriate.

Contemporary bioethics literature generally concurs with the premise that the use of placebo in routine clinical care is inappropriate. The philosophic basis for concern about the placebo resides in a reverence for the principle of autonomy. Much emphasis is given to the fundamental right of patients to be intimately involved in their healthcare decisions. Generally, deliberate deception of patients or withholding important medical information is judged to violate autonomy. Caregivers can be criticized for inappropriate paternalism when seeming to usurp a patient's need and right for truthful information. And certainly it is my sense that most patients, if appraised of the possibility, would be offended to think that their caregiver might judge their symptoms to "not be real" and give them an inert substance rather than a form of actual treatment.

For most general rules, one can posit exceptions. Perhaps in very infrequent circumstances, the use of placebo outside of a clinical trial is defensible. Most of the time, it is not. In instances in which a placebo might formerly have been used to try to determine the organicity of a patient's symptoms, it now seems more appropriate to honestly confront the individual with the caregiver's concerns and recommendations. Placebo is derived from a Latin word which means "I shall please."³ But almost always, placebos do not please

the individuals who receive them as implied treatment and later learn of this deception. A placebo by any other name is deceit. The use of placebo should not be condoned or enabled in the realm of ordinary clinical practice.

Jerome W. Freeman, MD
Editor

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Antibiotics And Breastfeeding

Jodi R. Heins, PharmD

Breastfeeding an infant is a choice made by many mothers. Inevitably, some of these mothers will become ill and may require antibiotic therapy. The medical provider must then consider not only the appropriate choice of antibiotic to treat the mother but also what risk the drug will present to the nursing infant.

Determining the risk to the nursing infant is a complicated task influenced both by maternal and infant factors. Maternal factors that influence the amount of drug that passes into milk include things such as the absorption, distribution, metabolism and excretion of the drug in the mother, the lipid solubility, molecular size, ionization, and protein binding of the drug, blood flow to the breast, mammary tissue composition, pH of the mother's plasma and breast milk, as well as the composition of the breast milk.^{1,2} Once the drug is known to be excreted into breast milk the actual risk to the infant is determined by factors such as absorption, distribution, metabolism, excretion and protein binding of the drug in the newborn. All of these factors can be influenced by the infant's age and may be significantly different in term infants compared with pre-term infants. Other factors to consider include the amount of milk consumed by the infant, timing of breastfeeding in relation to drug dosing (i.e. the concentration of the drug in the milk), dose of the medication, dosing interval and duration of therapy.¹

Once the decision to use an antibiotic has been made the provider needs to consider the possibility that even trace or low amounts of antibiotics in the breast milk could potentially cause problems in the infant. Potential problems to keep in mind are allergic sensitization, alterations in the flora of the gastrointestinal system, and interference with the interpretation of culture results in the newborn if needed.³ To help minimize the exposure of the drug to the infant the mother should be encouraged to avoid nursing at times of peak drug concentration. One should also note that pumping and dumping breast milk in an effort to more quickly remove the drug from the breast milk has been shown to be neither necessary nor effective.²

The good news is that several classes of antibiotics are considered safe for use in breastfeeding. Penicillins and cephalosporins are among the drugs that are considered safe. They are only found in trace amounts

in human milk and thus the infant is only minimally exposed to the antibiotic. However, the infant should be observed for the possibility of the development of rash, thrush or diarrhea.^{1,2,4} Erythromycin is also considered safe for use in lactation.^{3,5} One case of pyloric stenosis has been reported in a breast-fed infant whose mother was taking erythromycin.¹

Tetracycline has been shown to distribute into breast milk. This raises the issue of the potential risk of dental discoloration and inhibition of bone growth in the infant.^{3,4} Available data suggests however, that the absorption of tetracycline in the infant is minimal because of the inhibition of the drug's absorption by the calcium in the milk and thus the exposure risk is felt to be minimal.¹ Tetracycline is considered safe by the American Academy of Pediatrics.⁵

Mothers who are nursing an infant with glucose-6-phosphate dehydrogenase deficiency are cautioned against the use of nitrofurantoin and sulfonamide drugs. Nitrofurantoin is excreted into breast milk in low concentrations. It is generally considered safe except in those infants with glucose-6-phosphate dehydrogenase deficiency who may develop hemolytic anemia from even minimal exposure.³

Sulfonamides may cause hemolysis in a glucose-6-phosphate dehydrogenase deficient infant and also have the potential to cause kernicterus in neonates.¹ The risk of kernicterus decreases as the newborn ages and the liver of the infant improves its ability to conjugate bilirubin. It is recommended to avoid use of sulfonamide antibiotics in infants who are ill, premature or stressed and those with glucose-6-phosphate dehydrogenase deficiency or hyperbilirubinemia². Sulfonamide antibiotics are contraindicated in women who are nursing an infant less than two months of age due to the risk of kernicterus.⁶ Sulfamethoxazole alone or in combination with trimethoprim can be used safely in women who are nursing older, healthy, full-term babies.¹

Ofloxacin and ciprofloxacin are excreted into breast milk³ however, it is unknown if this presents any danger to the infant.¹ Due to the potential for arthropathy and other toxicity in the infant it is recommended that the quinolone class of antibiotics be avoided during breast feeding.^{1,3}

For the vast majority of cases, breastfeeding can safely be continued during antibiotic therapy. The mother should be educated on potential problems that could develop in the infant and be encouraged to report any unusual symptoms that the infant displays.

Unfortunately, the information available to the health care provider is limited for many drugs due to a lack of well designed clinical studies. Several good review articles and monographs have been published on the use of drugs in lactation.¹⁻⁵ The reader is encouraged to consult these articles for a more comprehensive list of medications and their relative safety in breastfeeding.

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A Primary Germ Cell Tumor Of The Anterior Mediastinum: A Case Report And Discussion

Kevin Weiland, MD; Jason Conley, MSIV

ABSTRACT

The anterior mediastinum is the most common extragonadal location for germ cell tumors and accounts for about 50% to 70% of such neoplasms.¹ Embryonal cell carcinomas are one of the rarest forms and account for less than 2%.⁶ We present the case of a 19-year-old, white male who was found to have a primary embryonal cell carcinoma of the anterior mediastinum. This case illustrates the subtle complaints that these patients present with, some of the problems and decisions that go into making the diagnosis, and the response to the appropriate therapy. The following discussion takes a look at the variety of germ cell tumors, the vast differential of an anterior mediastinal mass, the workup of such a mass, and the various treatments and outcomes of extragonadal germ cell tumors.

INTRODUCTION

Extragonadal germ cell tumors are quite rare and can be found in the pineal gland, retroperitoneum, sacral area, and most commonly the anterior mediastinum. These areas correspond with the embryologic urogenital ridge. It is felt that early germ cells are interrupted in their migration during early embryogenesis and

subsequently undergo malignant transformation. The extragonadal germ cell tumors are not simply metastatic lesions, but are primary tumors. Those located in the anterior mediastinum account for approximately 50% to 70% of the extragonadal germ cell tumors.² In adults, the germ cell tumors comprise 15% of all mediastinal tumors, and in children approximately 24% of all anterior mediastinal masses.²

CASE REPORT

This is an obese 19-year-old, white, non-smoking male who presented to the clinic with a chief complaint of persistent, non-productive cough that he first began to notice approximately two months prior to his initial visit. The cough was accompanied by a dull, pleuritic type chest pain located to the left of his sternum and radiating towards his left shoulder, was worse at night, and would be triggered upon venturing into the cold air the past winter. He had tried over-the-counter cough medications without relief. The patient also described some shortness of breath at night accompanied by some vague chest discomfort that was separate from the pleuritic pain associated with the cough. This discomfort and shortness of breath were both worse when he slept on his right side. He also complained of mild dysphagia with solid foods. He denied any hemoptysis, fever, chills, night sweats, fatigue, or weight changes.

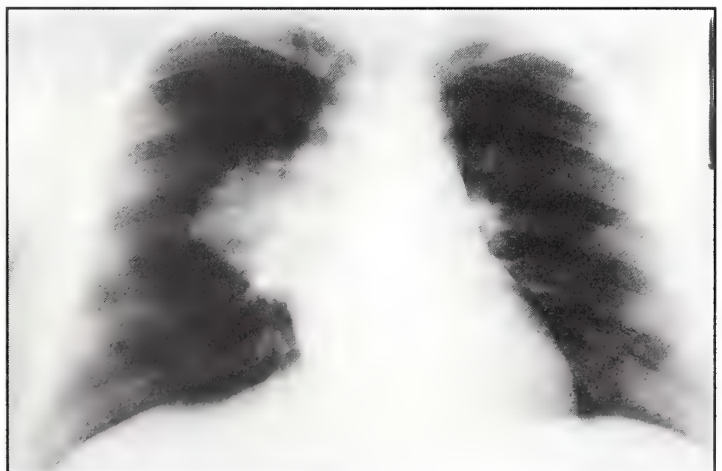


Figure 1

The past medical history included hydrocephalus diagnosed at two months of age for which he had since undergone numerous ventriculoperitoneal shunt surgeries and revisions. His only medication at the time of presentation was amitriptyline for some

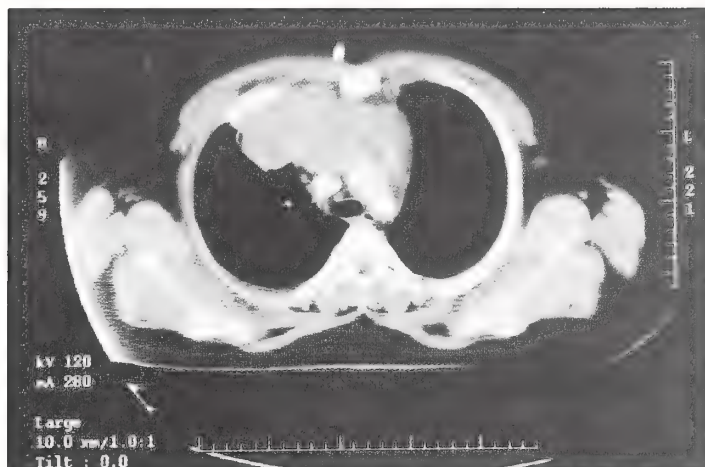


Figure 2

Lateral chest roentgenograms and PA were obtained revealing a single, large anterior mediastinal mass (Fig. 1) which appeared solid and extended to the right of the sternum and measured approximately 7cm by 8cm. The x-rays were otherwise normal. A CT scan of the chest was done the same day and showed the lesion to be an anterior mediastinal mass. There was no invasion into the lung parenchyma and no other adenopathy was noted (Fig. 2). Abdomen and pelvis CT scans showed no adenopathy. The CT scan of the head showed no pituitary lesions or other masses. Testicular ultrasound was also done which showed normal testes that were without masses and measured 2.9cm in the longest dimension.

Initial laboratory data showed a WBC of $9.5 \times 10^3/L$ with normal differential, a hemoglobin of 12.8g/dl, hematocrit of 40.5%, platelet count of $534 \times 10^3/L$, and an erythrocyte sedimentation rate of 57 mm/hr. Beta-HCG was less than 2miu/ml (normal) but alpha-fetoprotein (AFP) levels were markedly elevated at 3,336ng/ml.

A right mediastinotomy was performed. The biopsy showed necrosis and highly atypical tumor cells in a solid and papillary pattern. The cells had large, irregular nuclei and prominent nucleoli. Numerous abnormal mitotic figures were seen as well. The pathologic specimens were examined and only a single tumor cell-type was identified (Fig. 3).

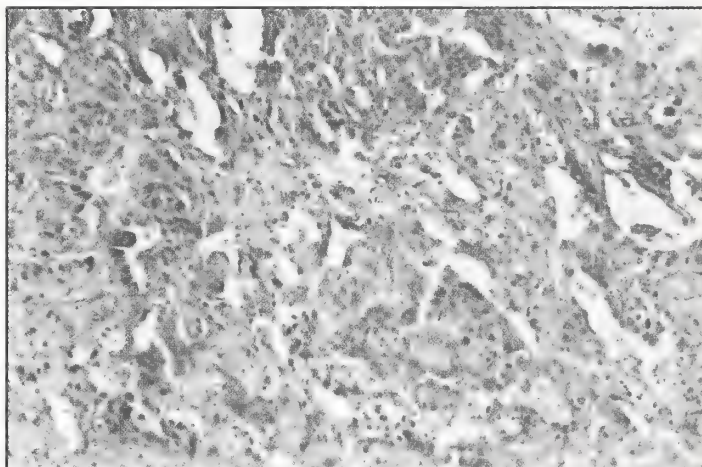


Figure 3

He received four courses of cisplatin, bleomycin, and etoposide-based chemotherapy. After his first course of treatment, his AFP level dropped to 794.8ng/ml, and has continued to drop rapidly with treatment. At the end of chemotherapy, about three months from presentation, the level of AFP was 7.9ng/ml. It has since plateaued at 4.5ng/ml at five months from presentation while the tumor continued to decrease in size. Radiation therapy was begun to treat the residual tumor.

DISCUSSION

Germ cell tumors of the anterior mediastinum can be divided into two large groups, teratomas and non-teratomatous germ cell tumors, and are histologically similar to their gonadal counterparts.³ The teratomatous lesions, which are neoplasms that consist of elements from the three germ cell layers, can be further divided into benign or mature and malignant or immature. A combination of benign or malignant teratoma and other

chronic headaches. This gentleman also has a history of cleft lip and palate that has been successfully repaired. On review of his old records, he does have a history of seasonal allergies and childhood asthma.

On physical examination, the head, ears, eyes, nose and throat showed no signs of infection. He did have an obvious cleft lip and palate that had been repaired successfully. His neck was supple and there was no anterior or posterior cervical, submandibular, or supraclavicular adenopathy palpable. His heart showed a normal S1 and S2 with a regular rate and without any extra sounds. The patient had good breath sounds and faint expiratory wheezes were heard bilaterally with no rhonchi or rales noted. His abdomen was obese without organomegaly. There was no epitrochlear, axillary, or inguinal lymph nodes palpable. His testes were a bit small, soft without masses.

nonteratomatous germ cell tumors may occur. The nonteratomatous germ cell tumors include seminomas, yolk-sac tumors, embryonal cell carcinomas, choriocarcinomas in pure form or combined with both teratomatous and any of the other nonteratomatous germ cell elements above in a variety of combinations.

Benign teratomas of the anterior mediastinum have mature skin, smooth muscle and respiratory epithelium as their most common cellular components. They

behave in a benign fashion and are generally well encapsulated and may appear solid or cystic on radiographic examinations. They occur in equal numbers in both sexes between 20 and 40 years of age and account for about 27% of the mediastinal germ cell tumor.⁴

Immature teratomas have more immature elements, often neuroblastic elements, and generally behave in a more aggressive fashion. In children less than 15 years of age immature teratoma can behave like their benign counterparts. In adults immature teratomas are more aggressive and may metastasize or recur.¹ They represent just fewer than 2% of the mediastinal germ cell lesions.

Some teratomas may show additional malignant degenerations most commonly squamous cell carcinoma but also adenocarcinoma or various connective tissue sarcomas such as rhabdomyosarcoma, chondrosarcoma or osteosarcoma. These tumors generally behave like the individual tumor elements, comprise 14% of the germ cell tumors mediastinum, and are also most commonly found in young men.⁴

The nonteratomatous germ cell tumors are composed of cell types that are also similar to the corresponding gonadal lesions. The seminomas represent the vast majority of these tumors and account for over 37% of the total anterior mediastinal germ cell tumors. They are most common in men between the ages of 20 and 40.⁵ The majority of patients have metastases or invasion at the time of diagnosis.¹ The other nonteratomatous tumors are rare and have a worse prognosis compared to seminomas. They are also more likely to be associated with various hematologic malignancies and Klinefelter's syndrome.⁵ Rare pure yolk-sac tumors constitute about 12%, pure choriocarcinomas about 2.5%, embryonal cell carcinomas less than 2%, and various combination of different cell types 3% of the total primary germ cell tumors in the anterior mediastinum.⁶

Differential Diagnosis of a Primary Anterior Mediastinal Mass

The mediastinum can play host to a wide variety of tumors other than teratomas and germ cell tumors. These include thymomas, lymphomas, endocrine tumors and mesenchymal lesions.

Thymomas are the most common tumor of adults. In the adult population, these lesions generally arise in equal numbers of men and women older than 40 years of age and account for 47% of the primary anterior mediastinal masses, but only 17% of such masses in children. Thymomas have a complex histologic classification and are associated with myasthenia gravis

in 10% to 50% of patients. Rare forms of thymic lesions include the thymic carcinoid, thymic carcinoma, thymolipoma, benign thymic cysts or hyperplasia. The carcinoid tumors occur mostly in men over 40 years of age and usually do not result in classic carcinoid syndrome but may produce ACTH resulting in Cushing's syndrome. The thymic carcinoma is quite rare, but is an aggressive neoplasm with a five-year survival rate of 35%.¹ The thymolipomas are rare but can be quite large.

Lymphomas of the mediastinum can be Hodgkin's or non-Hodgkin's type, develop at all ages and may be presenting or primary lesion or part of systemic disease. These tumors generally develop between 30 to 40 years of age and in both sexes equally. Nodular sclerosis is the most common type of Hodgkin's disease to arise in the anterior mediastinum but large cell lymphoma, often with sclerosis, is the most common type of non-Hodgkin's lymphoma. Castleman's disease or benign lymph node hyperplasia is another rare lymphatic lesion that can appear in the mediastinum.²

Mediastinal goiter as part of thyroid goiter or as a separate lesion can also be located in the anterior mediastinum, usually in adults. The goiter may present with a mass effect. The anterior mediastinum is a common location for ectopic parathyroid tissue or parathyroid adenoma.

Mesenchymal tumors account for about 7% of adult anterior mediastinal tumors and include tumors of fibrous, adipose, smooth muscle, striated muscle, and vascular origins. Lipoma is the most common type of mesenchymal tumor found in the anterior mediastinum and may account for up to 2% of tumors in this location. These masses occur in both sexes, may be benign or malignant, and are often treated with surgical resection.^{1,2}

Diagnosis of a Primary Anterior Mediastinal Mass

The presentation of a primary anterior mediastinal tumor can vary from being completely asymptomatic to producing cough, chest pain or shortness of breath and dysphagia as illustrated in this case presentation. Other symptoms may include hemoptysis, superior vena caval syndrome, hoarseness or Horner's syndrome from the direct effects of the tumor mass or constitutional symptoms such as fever, chills, night sweats, weight loss, weakness or fatigue.

Once an anterior mediastinal mass is seen on a roentgenogram, a CT scan of the chest should be ordered as well as abdominal and pelvic CT scans to look for other adenopathy or masses, differentiate a solid from cystic lesion, obtain an accurate location of the tumor within the mediastinum, the relationship to other

anterior mediastinal structures, and whether or not there is any invasion into those structures. Clinical and ultrasound examination of the testes is important to differentiate a primary from metastatic germ cell tumor or teratoma.

Common usual laboratory tests include a hemogram, basic chemistry panel and LDL (lactic dehydrogenase). Alpha-fetoprotein and a beta-HCG are particularly helpful in differential diagnosis and to establish a baseline for treatment of germ cell tumors. Alpha-fetoprotein is elevated in 60% to 80% of embryonal cell carcinomas and yolk-sac tumors. Beta-HCG is elevated in most choriocarcinomas and in less than 10% of seminomas.

The final diagnosis will rest on tissue pathology. This can be accomplished by direct surgical approach, a CT-guided fine needle aspiration, or mediastinoscopy. The choice of modality depends on the location and relationship of the tumor to other structures as seen on the CT scan. The final decision will rest with the surgeon or radiologist in consultation with the pathologist and depends on their preference and experience with the various procedures.

TREATMENT

Once the diagnosis of a primary germ cell tumor of the anterior mediastinum has been made, the treatment depends on the histological subtype of the tumor. Benign teratomas, which are usually well encapsulated, are often cured with surgical resection alone. Malignant teratomas, in patients older than 15 years of age, are much more aggressive and will need chemotherapy. Seminomas are very radiosensitive tumors and radiation was once the mainstay of treatment. They are now being treated with combinations of chemotherapy, radiotherapy, and possible surgical debulking of any residual tumor. These patients may be disease free after 24 months 70% to 80% of the time.^{5,7} The treatment of nonseminomatous germ cell tumors including embryonal cell carcinoma, choriocarcinoma, and yolk-sac tumor is now based around cisplatin based therapy. The different chemotherapy agents used in combination with cisplatin include bleomycin, etoposide, and ifosfamide. Carboplatin is another platinum based compound, like cisplatin, but is less toxic and is being evaluated. The aim of therapy is tumor shrinkage with chemotherapy and surgical resection of any residual tumor mass if possible. The long-term outlook for these patients varies and only 42% of patients reach a disease free state of greater than 24 months.⁷

CONCLUSION

Primary germ cell tumors of the anterior mediastinum are quite rare. These tumors must be

considered in the vast differential of such a mass, especially in a young man between the ages of 20 and 40 years of age. The presentation is often subtle and complaints should not be overlooked. The diagnosis depends on a good history, physical, supporting laboratory and x-ray data, and finally on a tissue biopsy. The treatment varies with the histological subtype of the tumor, but generally revolves around chemotherapy with cisplatin-based regimens, possible radiotherapy, and surgical debulking. The outcome depends on the subtype as well and long-term disease free states can be reached in about 42% of patients with the more aggressive types of germ cell tumors. The more benign tumors may be completely cured with surgical resection.

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The 1999 Annual Report Of The Regional Infant And Child Mortality Review Committee

Brad Randall, MD; Ann Wilson, PhD

ABSTRACT

The 1999 Annual Report of the Regional Infant and Child Mortality Review Committee (RICMRC) is presented. Our Regional (Minnehaha, Lincoln, and Turner Counties) incidence for Sudden Infant Death (SIDS) continues to significantly exceed the national rate. In this study, SIDS is strongly associated with prone sleeping and sleeping on soft surfaces or bedding. The Back-to-Sleep campaign that has been an important part of lowering the national SIDS rate appears to have been less successful in our region. The Regional Infant Child Mortality Review Committee therefore has elected to serve not only as a data collection committee, but has also actively engaged in community education programs directed towards providing a safer environment for our children.

Last year the *Journal*¹ published the 1998 Annual Report of the Regional Infant and Child Mortality Review Committee (RICMRC).³ The purpose of that publication was to both encourage formation of other infant and child death review committees across South Dakota, and, to emphasize strategies that might be helpful in further preventing infant and child deaths in South Dakota. The same goals continue to exist for the 1999 RICMRC Annual Report.

The review of infant and child deaths, however, is not a static process. We felt it would be informative to present the 1999 RICMRC Annual Report as an update of our efforts to make South Dakota a safer place for our children.

The 1999 RICMRC Annual Report illustrates that the Sudden Infant Death Syndrome (SIDS) continues to be a major source of excess infant deaths as compared to the national SIDS rate. Infant prone sleeping and infant sleeping on soft surfaces or bedding continues to be major risk factors for SIDS in our region of South Dakota.

Nationally, the rate for SIDS has shown a decline following the implementation of the Back to Sleep campaign of placing infants to sleep on their backs.² The fact that our regional SIDS rate remains high suggests that Back to Sleep may not be as effective

regionally as it has been nationally (although prone sleeping rates are not available for our region). Therefore, as a committee, RICMRC embarked on a campaign to help educate our communities about the life saving attributes of infant supine sleeping. The print and broadcast news media covered the press conference where the Annual Report was released. In addition, RICMRC was instrumental in the broadcast of a series of public safety announcements calling for supine sleeping in infants. The health care professional members of RICMRC also have worked within the medical community to encourage physician advocacy of infant supine sleeping. Regional Infant and Child Mortality Review Committee members have also engaged in other educational activities promoting firearm safety for children.

The RICMRC has demonstrated how local/regional infant and child death review can both identify local/regional risks for infant and childhood deaths and additionally address potential remedies for reducing the risks for those deaths. The advantage of local/regional death review is the ability of local death committee members to take a "hands on" approach to creating solutions for their own local/regional risk factors for infant and childhood deaths. The authors hope that other communities and regions of South Dakota can also

³Includes Minnehaha, Lincoln, and Turner Counties

institute review committees to address the risks of their own unique populations of infant and childhood deaths.

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Regional Infant and Child Mortality Review Committee 1999 Final Report

The Minnehaha County Infant and Child Mortality Review Committee was established in 1997 with the aim of examining deaths of children to identify strategies that may decrease the risk of loss of young life in our county. In 1998, it expanded its mission to include review of deaths of counties in the Southeastern Region of South Dakota. In early 1998, Lincoln County requested that deaths of children in its county be reviewed by the what is now called the Regional Infant and Child Mortality Review Committee. In 1999, Turner County was added to the review area.

The Committee is chaired by the Minnehaha County Coroner and is composed of professionals representing expertise in pediatrics, nursing, law enforcement, child protective services, emergency medical services, and mental health. The Lincoln and Turner County sheriffs have been invited to be present for the reviews of deaths of children in their counties. To operationalize its goal of preventing deaths of infants and children in the region, the population of deaths to be reviewed is defined by the following criteria:

- children under the age of 18 dying subsequent to hospital discharge following delivery
- and
- children who either died in Minnehaha, Lincoln, or Turner Counties from causes sustained in those respective counties, or who died elsewhere from causes sustained in the three county region.

Seventy childhood and infant deaths occurred in the tri-county review area in 1999 (66 from Minnehaha County, 2 from Lincoln County, and 2 from Turner County). Of these deaths, 38 were residents from outside the review counties. For illustrative purposes,

TABLE 1

Minnehaha Cty Resident Deaths	Infant	1-14 Years	15-17 years	Total
1999	23	5	3	31
1998	22	9	8	39
1997	15	4	2	21
1996	11	7	4	22
1995	18	5	4	27
1994	15	6	5	26
1993	17	4	3	24
1992	16	5	0	21
1991	19	6	6	31

Data for 1997-1999 from the Minnehaha County Infant and Child Mortality Review Committee.
Data for 1991-1996 from the SD Department of Health.

the age distribution of childhood deaths of Minnehaha County residents is presented in Table 1. Of importance to the interpretation of the data on infants and children presented in Table 1 is that 20%-30% of all the Minnehaha County resident deaths occurred in the first 28 days of life (neonatal), and some of these occurred within hours of birth.

In 1999, 24 deaths met the Committee criteria and were reviewed. Twenty of the reviewed deaths occurring in Minnehaha County were of Minnehaha County residents. There were two deaths involving Lincoln County which represented one Lincoln County resident who died in Lincoln County and one non-Lincoln County resident dying in Lincoln County. Two deaths occurred in Turner County, one Turner County resident and one out-of-state resident.

The deaths reviewed are listed below separated by manner of death. The number of deaths for 1999 in each manner category is listed adjacent to the manner heading. Numbers listed in parenthesis () represent the comparable number of deaths from 1997 and 1998. Care must be taken in comparing data from 1997 through 1999 due to the addition of Lincoln and then

Turner Counties in each subsequent year. However, since the bulk of the cases are contributed by Minnehaha County, some meaningful comparison of data between years is justified.

Natural Deaths 17 (14- 1998, 5- 1997)

Eight of the 17 natural deaths reviewed represent Sudden Infant Death Syndrome (SIDS) cases, including one case of probable SIDS. The infants ranged in age from one month to nearly seven months of age. These SIDS cases represent an enormous increase in deaths from our one SIDS death in 1997 and returns us to the level of SIDS deaths last seen in 1995. We are gravely concerned that the number of SIDS not only remains high, but is even higher than reported in 1998. The apparent SIDS rate in our region is considerably higher than the national rate for SIDS deaths. The explanation for this alarmingly high regional SIDS rate is unclear, however, three risk factors were prominent in many of these deaths. Many were associated with the infant sleeping on his or her stomach at the time of death. Secondly, many were also associated with the infant sleeping on overly soft bedding (thick blankets, quilts, soft pads, bed spreads, etc.). Maternal smoking and exposure to secondhand smoke was also seen with some of these deaths.

In 1998 there was one death attributable to Medium Chain Acyl Coenzyme A Dehydrogenase deficiency (MCAD). In 1999 there was a death due to a similar genetic defect in fatty acid metabolism involving short chain fatty acids, SCAD. The Committee is glad to see that area hospitals are now electively offering expanded newborn screening for fatty acid and other metabolic defects. The 1999 SCAD death reemphasizes the need for more comprehensive newborn screening as part of the mandated South Dakota newborn screening program.

Eight deaths occurred in children from four days to 17 years of age representing underlying natural diseases (infections to malignancies) for which medical care was appropriate and no preventive measures were identified.

Accidental Deaths 1 (3- 1998, 1- 1997)

Motor vehicle related deaths continue to be a major cause of childhood accidental deaths. One 16-year-old adolescent died in a motor vehicle crash. The use of seat belts continues to be a major prevention goal. One seven-year-old died as a pedestrian struck by an automobile. A 13-year-old died when she was trapped beneath a malfunctioning garage door. A 17-year-old was accidentally electrocuted when subsequent to a motor vehicle crash his vehicle came into contact with a downed power line.

Suicidal Deaths 1 (3- 1998, 1- 1997)

One 15-year-old died from a self-inflicted gunshot wound. This death, and that of the following child, both raised questions regarding the necessity of recognizing depressive symptoms in both children and their care givers along with related questions of appropriate firearm safety and storage.

Homicidal Deaths 1 (0- 1998, 0- 1997)

A ten-year-old child died from gunshot wounds inflicted in a murder-suicide situation. The Committee is grateful, however, that no recognized abusive infant or childhood deaths have occurred during either our 1997, 1998, or 1999 reviews. This speaks well for our region and the low incidence of lethal violence related to raising children. Physical child abuse, however, does exist in our community and we will have to continue to work hard to assure that abusive child abuse homicides do not occur in the future.

Undetermined Deaths 1 (2- 1998, 1- 1997)

A three-month-old child died in a SIDS-like situation. However, the child was sleeping on a dangerously soft and potentially confining surface such that the possibility of suffocation could not be adequately excluded.

ADVOCACY ISSUES

Although the Committee believes that its review and subsequent annual reports are in themselves a form of child advocacy, we did undertake additional advocacy activities in 1999:

1. The Back-to-Sleep message of infants sleeping on their backs was presented in both the print and broadcast media. Back-to-Sleep public service announcements were aired during the peak winter SIDS season. Members of the Committee were also active in bringing the Back-to-Sleep message to the medical and nursing staffs of our regional hospitals.
2. The area medical professionals were made aware of the presence of fatty acid metabolic defects and the screening strategies available to detect these defects. An article co-authored by one of the Committee members discussing these defects appeared in the *South Dakota Journal of Medicine* in 1999. The appropriate newborn screening tests are now routinely available in our regional hospitals. The South Dakota Department of Health is seriously considering avenues to proceed jointly with other states in the region to make this testing a part of the mandated newborn screening for all South Dakota children.

3. The Committee's 1998 Annual Report was published in 1999 in the *South Dakota Journal of Medicine*. We hope that this will be a continuing publication which will alert all of the State's physicians to health risks confronting our infants and children. Hopefully this publication may also encourage others throughout the State to formulate similar infant and child death review committees.
4. As a follow-up of a previous Annual Report, the Committee was pleased to discover that rumble bars designed to alert errant drivers are now a prescribed part of new interstate highway construction in South Dakota.
5. In part, as a result of previous Committee recommendations, life saving equipment is now available at Falls Park in Sioux Falls.
6. Continue to expand our infant and child death reviews into adjacent counties.

SUMMARY OF PREVENTION ISSUES

The Regional Infant and Child Mortality Review Committee concludes its report with the following recommendations (listed in the order which we believe may prevent the most deaths and which will be the easiest to implement. Starred items are repeats from the 1998 report):

1. *ALL INFANTS SHOULD BE PLACED ON THEIR BACKS TO SLEEP. Side sleeping is not recommended. Hospitals, physicians, and other health care providers need to emphasize the need to place infants on their backs to sleep and to model this in their infant care practices.
2. *INFANTS SHOULD NOT BE PLACED ON OR NEAR SOFT BEDDING, BLANKETS, QUILTS, OR PILLOWS, particularly while sleeping or while unsupervised. Even for infants sleeping on their backs.
3. *All infants and children need to be properly restrained while riding in motor vehicles. This warning places special emphasis on teenagers as they begin their independent driving years. Parents and other adults are an important role model for encouraging seatbelt use.
4. *Firearms represent lethal hazards, not only to small children, but to older children and adults at risk for suicide. Firearm vaults and trigger guards represent means to reduce the risk of unauthorized firearm use.
5. *The community needs to be able to recognize and appropriately respond to suicide risk factors. We believe that the area schools have responded well to this challenge but further vigilance is needed.
6. A potential exists for the catastrophic failure of garage door suspension systems. Malfunctioning garage doors can pose a significant hazard to children and adults alike and should be made inoperative until serviced. Walking under partially opened garage doors is extremely dangerous and should be rigorously avoided by everyone.
7. *MCAD deficiency, and other similar defects of fatty acid metabolism, are relatively common and easily treatable inborn errors of metabolism that should be included in the State mandated newborn screening panel. Clearly, some SIDS deaths in the past have represented MCAD deaths. The South Dakota Health Department is addressing this issue and we hope that they continue to proceed towards universal testing for MCAD and its related disorders. Parents may wish to individually have this testing done on their newborns.
8. *Maternal smoking and drinking during, and after, pregnancy represent risk factors for SIDS. Second hand smoke also is a SIDS risk factor. Parents should make every effort to restrict these activities for the well-being of their infants. We encourage the creation of programs that assist parents in abstaining from tobacco and alcohol use.
9. Motor vehicle crashes where a vehicle leaves the roadway and strikes an electrical pole create a risk for electrocution. Obviously downed power lines must be avoided at all costs. Persons at such a scene, however, should be diligent to search out not only potentially downed lines, but also lines that may have inconspicuously come into contact with adjacent vehicles (and their antennas) or metal fencing. Great care should be exercised in exiting or approaching a motor vehicle in such circumstances. Immediate emergency assistance from the appropriate power company personnel is the only safe means to handle such a situation.
10. *Although none of this year's review deaths addressed this concern, we continue to believe that older children often do not have regular physical check-ups. We, as a Committee, recommend that all children have periodic physical examinations to detect potentially preventable illnesses.

Report submitted by the Regional Infant and Child Mortality Review Committee:

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LACK OF PHYSICIAN REFERRAL/STAFF SUPPORT

The recommendation by a woman's physician is one of the strongest predictors of mammogram utilization. Remembering to order mammograms poses a significant challenge for primary care providers. Older women may have other, competing health concerns, such as heart disease, high blood pressure, diabetes, arthritis, or osteoporosis. The need to treat an acute condition may take precedence over the need for a mammogram. However, physicians are not the only members of the health care team who can effectively deliver this important prevention message. Redesigning clinic processes so that all appropriate staff are empowered to assess a woman's mammography status, help her schedule her mammography appointment, and reinforce her follow through can significantly increase mammography screening.

PERCEPTIONS THAT THEY ARE TOO OLD TO GET BREAST CANCER

A review of the medical literature found that older women do not recognize that increased age is the strongest risk factor for breast cancer.

CONFUSION ABOUT COST - THE 365 DAY RULE

Medicare beneficiaries age 40 and over are entitled to one screening mammogram every 365 days. It has to be the full 365 days before Medicare will cover another screening mammogram. Medicare beneficiaries need to understand that the 365-day frequency rule does not apply when the screening mammogram becomes diagnostic. Medicare will pay for as many diagnostic and follow-up mammograms as the doctor determines is medically necessary.

FEAR OF FINDING BREAST CANCER

Among women over the age of 65, the sensitivity of mammography is increased. Older women do not recognize that, if diagnosed early, breast cancer can be treated with the greatest likelihood of a positive outcome.

FEAR OF THE PROCEDURE

New methods, including adjustment of the plate pressure, have shown good success with no loss of image quality.

ROOM FOR IMPROVEMENT

In 1997-1998, 43% of female Medicare beneficiaries in South Dakota between the ages of 50 and 67, and 85% of Native American women did not receive a screening mammogram.

October is Breast Cancer Awareness Month. The advice of a trusted physician is the key to improving the mammography rate in South Dakota and thereby, earlier detection and treatment of breast cancer.

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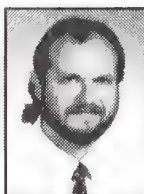
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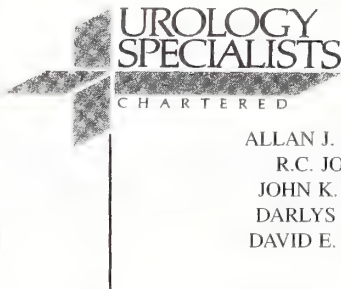
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Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced;
Info: Sharon Sulzbach, 347-7145.

OCTOBER 2000

- Oct 17 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 17 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II;
Info: Kris Rahm - 357-1366.
- Oct 17 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Oct 18 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Harold Lloyd Kennedy MD MPH;
Topic: Beta Blocker Treatment in Chronic Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 18 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Oct 18 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Oct 18 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Oct 18 **USDSM Audio Conference** - 2:00 PM (CST)/1:00 PM (MST); Speaker: Henry D. Mitcheson MD; Topic: Practical Strategies for Treating Overactive Bladder; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 19 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Oct 19 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Oct 19 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Oct 19 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Oct 19 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: Jonathan M. Vapnek MD; Topic: Frequency, Urgency and Incontinence; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 19 **USDSM Audio Conference** - 1:00 PM; (CST)/12:00 PM (MST); Speaker: Jonathan M. Vapnek MD; Topic: Frequency, Urgency and Incontinence; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 20 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Oct 20 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Oct 21 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Oct 23 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Oct 23 **Sports Medicine Grand Rounds - Sponsored by the Sports Medicine Center at the Orthopedic Institute** - - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Oct 24 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 24 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Oct 25 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Harold Lloyd Kennedy MD MPH;
Topic: Beta Blocker Treatment in Chronic Heart Failure; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 25 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Oct 25 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.

- Oct 25 **USDSM Audio Conference** - 11:00 AM (CST)/10:00 AM (MST); Speaker: Henry D. Mitcheson MD; Topic: Practical Strategies for Treating Overactive Bladder; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 26 **USDSM Audio Conference** - 12:30 AM; (CST)/11:30 AM (MST); Speaker: Stefan Gluck, MD, PhD; Topic: Breast Cancer Adjuvant Treatment – A Global Perspective; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 26 **USDSM Audio Conference** - 2:30 PM; (CST)/1:30 PM (MST); Speaker: Stefan Gluck, MD, PhD; Topic: Breast Cancer Adjuvant Treatment – A Global Perspective; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Oct 26 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Oct 26 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Oct 26 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Oct 26 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Oct 26 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Oct 27 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Oct 27 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Oct 28 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Oct 31 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Oct 31 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

NOVEMBER 2000

- Nov 1 **USDSM Audio Conference** - 1:00 PM; (CST)/12:00 PM (MST); Speaker: Henry D. Mitcheson MD; Topic: Practical Strategies for Treating Overactive Bladder; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 1 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 1 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Nov 1 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 1 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Nov 1 **Spine Grand Rounds - Sponsored by Avera McKennan and the Spine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand, 339-6832.
- Nov 2 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Jonathan M. Vapnek MD; Topic: Frequency, Urgency and Incontinence; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 2 **USDSM Audio Conference** - 2:00 PM; (CST)/1:00 PM (MST); Speaker: Jonathan M. Vapnek MD; Topic: Frequency, Urgency and Incontinence; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 2 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 2 **Grand Rounds** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Nov 2 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Nov 3 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Nov 3 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Nov 3 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Nov 4 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Nov 7 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Richard H. Grimm, Jr MD PhD; Topic: Goals for Hypertension Treatment in the New Century; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 7 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Nov 7 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

- Nov 8 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Henry D. Mitcheson MD; Topic: Practical Strategies for Treating Overactive Bladder; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 8 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 8 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 8 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Nov 8 **Dermatopathology Conference** - 7:30 AM; SVH Pathology Conference Room 1513; Info: 333-1730.
- Nov 9 **USDSM Audio Conference** - 11:00 AM; (CST)/10:00 AM (MST); Speaker: Jonathan M. Vapnek MD; Topic: Frequency, Urgency and Incontinence; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 9 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 9 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.
- Nov 9 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Nov 10 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Nov 10 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Nov 11 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Nov 13 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Nov 13 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Nov 14 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Jonathan M. Vapnek MD; Topic: Frequency, Urgency and Incontinence; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 14 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Nov 14 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Nov 14 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Nov 14 **Breast Cancer Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital BHI - 333-5244.
- Nov 15 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 15 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Nov 15 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 16 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Richard H. Grimm, Jr MD PhD; Topic: Goals for Hypertension Treatment in the New Century; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 16 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 16 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Nov 16 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.
- Nov 16 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Nov 17 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8061.
- Nov 17 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Nov 18 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Nov 20 **Sports Medicine Grand Rounds - Sponsored by Avera McKennan and the Sports Medicine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Nov 21 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Nov 21 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Nov 21 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Nov 22 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

- Nov 22 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 23 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 23 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Nov 23 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Nov 23 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Nov 24 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Nov 25 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Nov 27 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Nov 28 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Nov 28 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Nov 29 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 29 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 30 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 30 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

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OCTOBER 2000

- Oct 15-20 **Primary Care Conference**, Wyndham Rose Hall Resort & Country Club, Montego Bay, Jamaica. Fee: \$350. 18.75 hrs AMA Category 1 credit. Lorraine Byrd, Cutting Edge Educational Seminars, PO Box 5902, Vallejo, CA 94591. Phone: 707/553-9490. Fax: 707/553-9490. Email: cuttingseminars@aol.com.
- Oct 19-21 **Academy of Surgical Research 16th Annual Meeting**, Hyatt Regency, Cincinnati, OH. AMA Category 1 credit avail. Surfaces in Biomaterials Foundation, 13355 10th Ave N, Ste 108, Minneapolis, MN 55441-5510. Phone: 763/512-9103. Fax: 763/545-0335. Website: <http://www.surfaces.org>.
- Oct 21 **Best Practice in Preventive Primary Care: Evaluating and Managing Key Clinical Conditions**, EPN Ed Ctr, Washington Univ Med Ctr, St. Louis, MO. Fee: \$75. 6.5 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

NOVEMBER 2000

- Nov 1-3 **Adjuvant Therapy for Breast Cancer**, Natcher Conference Center, National Institutes of Health, Bethesda, MD. AMA Category 1 credit avail. Phone: 301/592-3320. Email: pkumar@prospectassoc.com. Website: <http://consensus.nih.gov>.
- Nov 2 **Geriatric Care for the Primary Care Physician**, Leighton Auditorium, Siebens Medical Education, Mayo Clinic, Rochester, MN. Fee: \$185. 8 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 507/284-2509. Fax: 507/284-0532. Internet: www.mayo.edu.
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- Nov 10 **High Risk Obstetrics and Gynecology for Providers**, Radisson Encore Inn, Sioux Falls, SD. Fee: Avera McKennan Affiliates: \$30/\$40; all others: \$60. 6 hrs AMA Category 1 credit. Contact Robin Wright, Avera McKennan, 1001 E 21st St, Sioux Falls, SD 57105. Phone: 605/322-8950. Fax: 605/322-8951. Email: robin.wright@mckennan.org.
- Nov 11 **Avera Cancer Institute's 2nd Annual Oncology Symposium 2000**, Radisson Encore Inn, Sioux Falls, SD. Fee: \$ AMA Category 1 credit avail. Contact Robin Wright, Avera McKennan, 1001 E 21st St, Sioux Falls, SD 57105. Phone: 605/322-8950.
- Nov 16-18 **Vestibular Labyrinth in Health and Disease (Otolaryngology)**, EPN Education Ctr, Washington University Medical Ctr, St. Louis, MO. Fee: \$445. 20 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Nov 17 **ASTRO Presentations (Radiation/Oncology)**, Washington University School of Medicine, St. Louis, MO. AMA Category 1 credit avail. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
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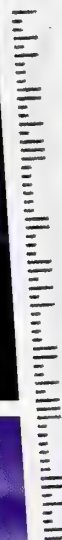


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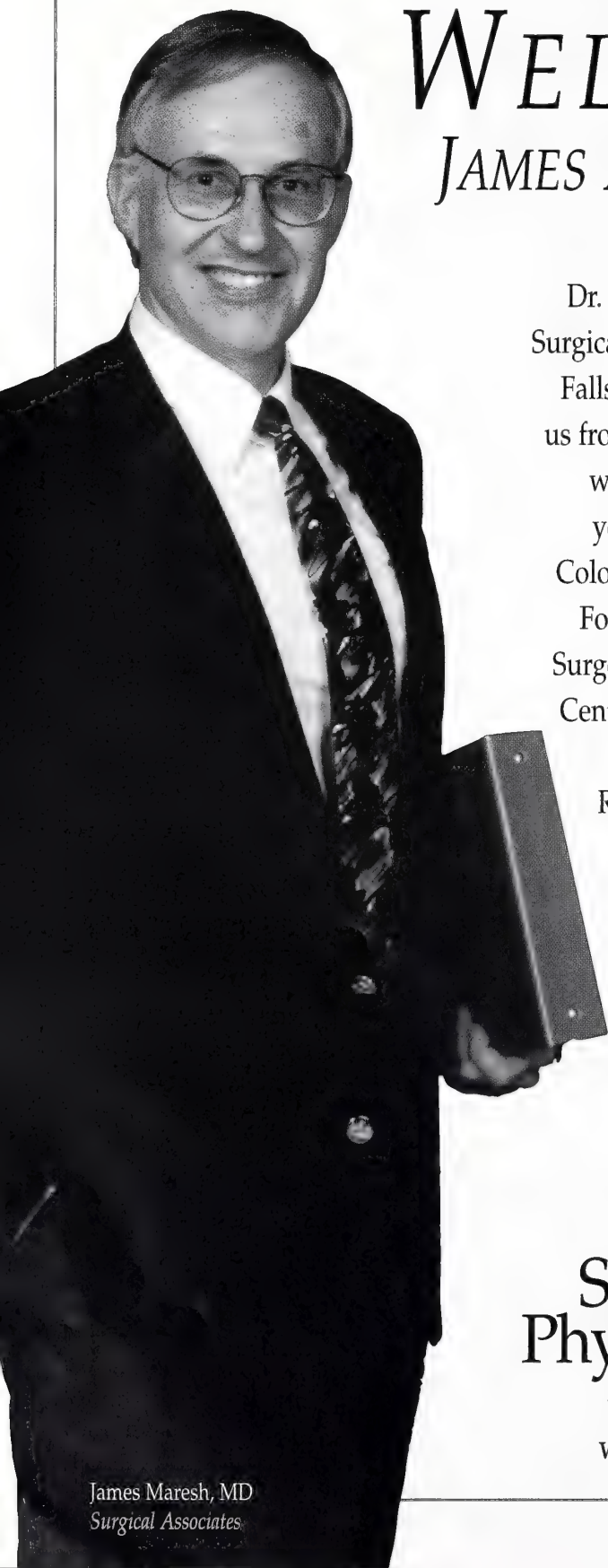
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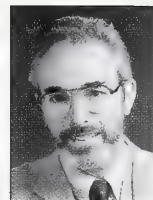
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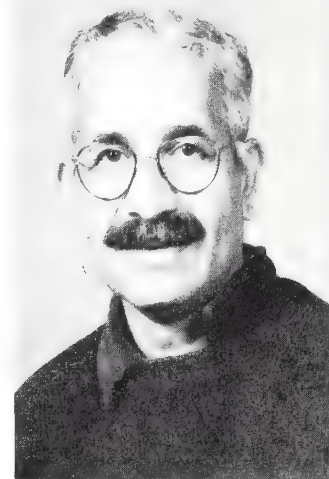
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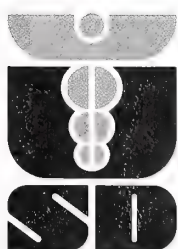
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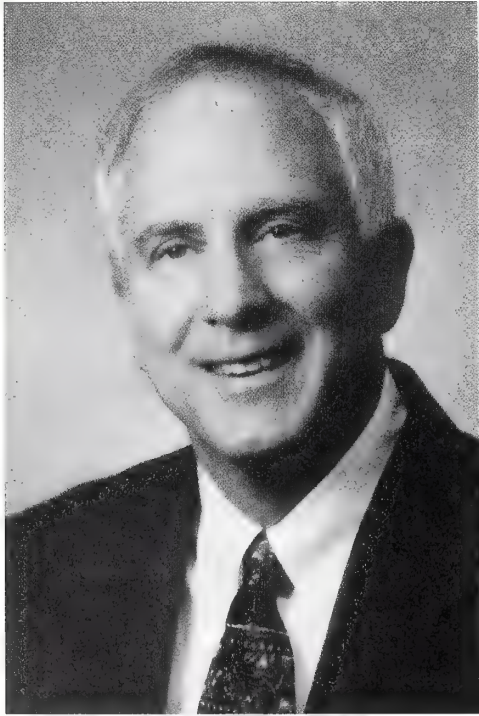
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About the Cover

The South Dakota Buffalo. Photo taken by Dr. John W. Herbst who owns Grizzly Bear Nature Photos in Keystone, SD.

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

Emtala . . . hmmm . . . Emtala . . . let me think. If it doesn't ring a bell, perhaps we should try a phrase-association test.

- (a) "My daddy had one - zero to sixty in 7.9 seconds!"
- (b) "Yikes! That's the one where you have to wear a space suit to examine the patient."
- (c) "Lauri Emtala - Finland's greatest long jumper."
- (d) "Will the defendant please rise?"

If you circled (d), you may take a bow - even if you're cynical rather than knowledgeable. EMTALA is the Emergency Medical Treatment and Active Labor Act. This law was enacted in 1986 in response to cases of women in active labor being turned away from hospitals, resulting in bad patient outcomes. The "Patient Anti-Dumping Statute" was conservatively enforced during its first few years, but recently has been

aggressively enforced partly because of reports that insurance company authorizations were delaying needed care. It has been such a problem in Nebraska that the Health and Human Services System of that state had to convene an EMTALA Task Force to get a handle on the situation and to clarify the rules for hospitals and doctors. Our PRO (The Foundation for Medical Care) will be educating South Dakota physicians about this law in the near future.

Basically the law says that anyone coming to a hospital emergency room, must receive a screening medical examination (not a triage by a nurse) and must be stabilized prior to transfer to a better equipped facility. The transfer must be done appropriately with notification of the receiving facility and records must accompany the patient. The hospital has to be careful to avoid delaying the screening exam for financial reasons.

Physicians are at real risk from EMTALA. The fine for each violation can be \$50,000 and the physician can be excluded from Medicare and Medicaid programs. Oddly enough the professional on-site ER physician is probably at less risk than the rest of us. He knows the rules and is already at the ER. The small town physician who is on primary call for the ER is at high risk. If called, you absolutely must go and see that patient within a reasonable time frame and take care of the problem, even if you are called to see the town's chronic patient for the tenth time. Likewise, the specialists on the staff must have a call list and must come physically to the ER when called by the staff. You cannot insist on talking to the ER physician first, and you must come promptly. The Health Care Financing Administration (HCFA) is trying to expand all of these obligations on physicians.

The Emergency Medical Treatment and Active Labor Act is like most of these burdensome laws. The intent is admirable, but the solution confirms the aphorism "Perfection is the enemy of good." Small town physicians must be in slingshot position awaiting ER calls and small city specialists on call must stay within an hour of the hospital. After a few \$50,000 fines, there will be fewer of each group and the majority of patients will suffer.

Alliance News



**Karen Waltman, President
South Dakota State Medical Association Alliance**

Election Day is quickly approaching and it will once again be time for our voices to be heard. There are debates, public forums, and discussions going on in many venues which can help us to determine our individual selections and who will get our vote.

Unfortunately, there are still signs of apathy when it comes to showing up at the polls. During the last Presidential General Election held in 1996, 86.8% of the voting age population in South Dakota registered to vote. Only 62.1% of this population voted.¹ These statistics reflect the interest from the voting age population, but more voices need to be heard across our state.

At a recent SDSMA Alliance Board meeting we were discussing this year's Legislative Day, which is scheduled for Thursday, February 8, 2001, in Pierre. Tom Graslie, SDSMA Alliance Legislative Chairperson,

and Dean Krogman, Director for Governmental Relations/SDSMA, are working cooperatively to plan this year's activities, as well as briefings on current legislative issues and interaction with the legislators.

As the discussion was concluding, Ruth Parry, SDSMA Alliance and SDMedPAC member, made a key point. She stressed that "all of us have the responsibility to be educated about the issues, listen to the candidates and their platforms and to get out and vote." Each and every vote counts.

With each election much is at stake for the medical profession. At the national level, the election results will directly affect legislation to protect the rights of patients, to revamp Medicare and Social Security, to allow collective bargaining by physicians, and to reform the tort system. Future appointments to the Supreme Court are also at stake.

Many of these issues will carry over to statehouses as well. Keep in mind that the real power to regulate physicians and their practices rests with the state, and that legislative results at that level also have immediate and direct consequences for the profession.²

After the election it is as important to stay in contact with our elected officials at all levels. Added perspective is gained every time a philosophy is shared, a position is debated, and a question is answered. This is necessary to maintain accountability from our elected officials, and to reinforce the democratic process.

For additional information on South Dakota Election Statistics, check out the South Dakota State Web Site at <http://www.state.sd.us/sos/stats.htm>.

It is our right and privilege to express our opinions in the public forum. Be sure to exercise your right to vote on Tuesday, November 7.

1. *South Dakota Election Statistics by Year.*

2. *American Medical News, Editorial, October 2, 2000.*

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This month my editorial will be replaced by a thoughtful discussion by Dave Gerdes, General Counsel to the South Dakota State Medical Association, on a recent case decided by the Supreme Court of the State of South Dakota. Because I felt the implications of the decision are far-reaching and open up an area of frightening speculation in medical malpractice, I thought all members of the SDSMA would be interested. I personally thank Mr. Gerdes for his incisive comments.

J.F. Barlow, MD
Editor

Jorgenson vs. Vener, Statistics Run Amok?

David A. Gerdes, Attorney at Law

In July the South Dakota Supreme Court decided Jorgenson vs. Vener, 2000 SD 87, 613 NW2d 50, in my opinion departing from its traditionally cautious and methodical approach to the adoption of novel or unconventional legal theories. The case would appear to contradict both recent trends in, and established, state law.

The plaintiff, David Jorgenson, was injured on August 16, 1997, when he jumped from a deck on the house at a relative's home in Wisconsin to a cement sidewalk below, shattering his lower right leg and ankle. At a nearby hospital, pins were inserted in the leg and ankle and the injury was stabilized with an external fixator. After five days in the Wisconsin hospital, Jorgenson returned home to Waubay and continued treatment with Dr. Michael Vener of Watertown, an orthopedist.

In late August, after noticing some drainage around the pins in Jorgenson's leg, Dr. Vener placed Jorgenson on a week-long course of antibiotics. Approximately one month after the accident, Dr. Vener realigned the external fixator. At that time an open sore of approximately one and one-half inches was noted on the lower shin of the leg. In late October, after Jorgenson became feverish and noticed drainage with a foul smelling odor from a blister on the leg, Dr. Vener prescribed another course of antibiotics. On November 10, the external fixator was removed. After Jorgenson noticed drainage and a foul smelling odor approximately two weeks later, with bone visible at the surface of the wound, Dr. Vener prescribed another course of oral and topical antibiotics. According to the decision, an appointment was made with a physician in Fargo to assess whether a free flap procedure should be

done, in Dr. Vener's words, "in order to salvage the limb."

Jorgenson did not keep the appointment in Fargo, but went to the Mayo Clinic in Rochester, Minnesota. On December 4, he was told he had two options concerning treatment of the leg: attempt a bone and skin graft, which would involve two years of treatment with a 60% chance of success, or immediate amputation. Jorgenson chose a below-the-knee amputation, which was accomplished on December 9, 1997.

The case reached the Supreme Court after the trial court granted Dr. Vener's motion for summary judgment, holding that no genuine issues of material fact existed, and that Vener was entitled to judgment on the merits as a matter of law. The trial judge decided that the evidence did not disclose negligence on Dr. Vener's part, and that the loss of chance doctrine is not compatible with South Dakota law.

Prior to this case, the South Dakota Supreme Court had not discussed what is called the loss of chance doctrine. This doctrine involves the proposition that a physician, by doing something wrong, has decreased the patient's chance of recovery or survival. Opponents of the doctrine point out that it alters or eliminates the requirement of proximate causation, that it relies upon speculative statistical evidence in order to show the extent to which the chance was lost by the physician's actions, and that relaxation of traditional causation standards will ultimately produce greater injustice in the form of increased medical malpractice litigation and higher malpractice insurance premiums. Proponents of the doctrine contend that it permits at least some form of recovery for the victim, rather than the all or nothing approach under the traditional standard of proof of

causation. They also contend that costs of uncertainty (whether a patient would have recovered but for the physician's negligence) should be imposed upon the wrongdoer rather than upon the innocent patient, and that any chance of recovery, no matter how small, is a valuable right, even though the chance of recovery may be less than probable (i.e., less than 50%).

In a four to one decision, the court adopted the loss of chance doctrine, returning the case for trial. The doctrine is controversial.¹

It is important to point out that the application of this doctrine is likely to be somewhat restricted because of its very nature. The loss of chance is treated as the compensable event, not the underlying injury itself. Thus, traditional causational doctrine applies to the question of whether loss of an opportunity to survive or an opportunity to achieve a better result has, in fact, occurred. If the jury decides that a loss of chance has, in fact, occurred, compensation is then based upon the statistical reduction of that chance. For example, if the chance lost was 40% before negligent treatment, and 20% after negligent treatment, the plaintiff would be compensated based upon 20% of the total loss related to the injury.

However, Justice Konenkamp filed a spirited dissent. He first criticized the decision because there was no evidence in the record that Jorgenson had lost a quantifiable chance of recovery, only a physician's affidavit indicating that Jorgenson had lost some unspecified chance to prevent loss of his lower right leg. At oral argument, Jorgenson's attorney admitted that he could not prove a percentage of damages.

Justice Konenkamp also pointed out:

Jorgenson himself elected to amputate rather than to take prolonged treatment to heal his leg. He chose amputation although his doctors at the Mayo Clinic told him he had a 60% chance of saving it. Now, he will seek compensation not for his lost leg, but for the percentage probability he had of saving it while in the care of his former doctor, before he went to the Mayo Clinic. If this seems legally insubstantial and illusory, imagine what a jury will strain to make of it. Most courts that apply this theory hold that to be accurately valued, the lost chance must be substantial, identifiable, and quantifiable, without resort to conjecture or speculation. * * * If the members of this court are determined to adopt the lost chance theory, they should wait at least until a case arrives to justify it.

Justice Konenkamp then went on to argue that no need for the doctrine exists, and that it should not be

adopted until there is a South Dakota specific reason for even considering it. He believed that this is more properly a subject left to the legislature.

Finally, Justice Konenkamp quoted from a Maryland case pointing out the danger of relying upon statistics to prove what is essentially a unique, individual loss. The doctrine may only multiply injustice:

[A]ssume a hypothetical group of 99 cancer patients, each of whom would have had a 33-1/3 percent chance of survival. Each received negligent medical care, and all 99 died. Traditional tort law would deny recovery in all 99 cases because each patient had less than a 50 percent chance of recovery and the probable cause of death was the preexisting cancer, not the negligence. Statistically, had all 99 received proper treatment, 33 would have lived and 66 would have died; so the traditional rule would have statistically produced 33 errors by denying recovery to all 99.

The loss of chance rule would allow all 99 patients to recover, but each would recover 33-1/3 percent of the normal value of the case. Again, with proper care 33 patients would have survived. Thus, the 33 patients who statistically would have survived with proper care would receive only 1/3 of the appropriate recovery, while 66 patients who died as a result of the preexisting condition, not the negligence, would be overcompensated by 1/3. The loss of chance rule would have produced errors in all 99 cases.

"There are three kinds of lies: lies, damned lies, and statistics."² Statistics have serious limitations. As we all know, they simply identify trends and do not address uniquely individual circumstances, which in the case of the practice of medicine, involves virtually every patient. Each patient is different. A statistician will tell you that it is equally probable for 100-year floods to occur in successive years, or for them to be separated by 100 years.

The difficulty with using statistics to settle a medical malpractice issue, or for that matter, any other legal issue, is that they do not provide the necessary case specific certainty which the law has long required. In negligence actions, the tort-feasor's conduct must be a proximate cause of the plaintiff's injury, or loss. As stated in South Dakota's Pattern Jury Instruction, this "... means an immediate cause of any injury, which, in natural or probable sequence, produces the injury complained of. Without the proximate cause, the injury would not occur." It is true that the proximate cause

need not be the only cause, but it must be an immediate cause which combines with other causes to cause the injury. It is also true that a person's chances of recovery are generally predictable by statistics in some, but by no means all, medical situations. In contrast, lost chance analysis is for all practical purposes total guesswork. The lost chance doctrine relies on nothing more than an educated guess by a medical expert to calculate the lost chance percentage. Here, the certainty required for any other kind of legal recovery is lacking (which, curiously, proponents believe recommends the theory).

It is somewhat peculiar that the Supreme Court would embrace this morass of statistics and percentages when its case of Wood vs. City of Crooks, 1997 SD 20, 559 NW2d 558, was so quickly and resoundingly reversed by the legislature. Historically, South Dakota's unique contributory negligence statute provided that a plaintiff who is contributorily negligent may still recover if that contributory negligence is slight when compared with the negligence of the defendant. The statute does not require, and historically jury analysis did not require, the use of percentages. In the Wood case, the Supreme Court tacitly approved the use of percentages and held that 30% negligence on the part of a plaintiff was more than slight, as a matter of law, reversing an award to the plaintiff. The legislature amended the contributory negligence statute to specifically overrule the Wood case and reiterate that the determination of slight negligence compared to that of the defendant be made without resort to percentages. In the case of evaluating contributory negligence, perhaps even more than with medical malpractice, the use of percentages is nothing more than sheer guesswork.

The court's decision is also puzzling, given the rejection of "pure" comparative negligence in the deliberations over the legislative treatment of the Wood case. This form of comparative negligence asks the jury to assign a percentage of fault to each party, and pay the plaintiff the difference where the defendant's percentage is greater than the plaintiff's. If this was unacceptable to lawmakers, why would percentages based on speculative statistical analysis involving a less than probable chance (less than 50%) make sense?

Of interest beyond the medical profession, the loss of chance doctrine was not limited by the court to just malpractice actions. It has a comparable potential diluting effect upon any tort action. Consider an uncontrolled intersection collision, where Smith and Jones collide. Smith was speeding westbound and Jones was northbound. Smith sues Jones for personal injuries contending that he, being the vehicle on the right when the vehicles entered the intersection at approximately

the same time, had the right of way. At trial, Jones proves Smith was speeding, thus forfeiting the right of way. Smith testifies that he was in a hurry to get to the hospital on time for radiation treatments to treat his cancer, because regular, timely treatment gives him a 40% probability of a cure. Nonetheless, the jury finds Smith's contributory negligence to be more than slight (because his desire to get to the hospital did not justify endangering himself and others) and awards no damages.

Now take the same case after Jorgenson. Smith's lawyer had read the Jorgenson case, so he also sued on the basis that the injuries Smith received reduced his chance of cure from 40% to 20%. Smith's oncologist testifies that his chance of cure was indeed reduced by the accident. Now his desire to get to the hospital is relevant to the jury's deliberation. While the jury finds against him for the collision injuries, it finds for him because of his loss of a chance of a cure! Does this make sense?

The Jorgenson case does not, in my opinion, represent a step in the right direction. It permits jurors and litigants to speculate based upon gross statistics, and destroys individual analysis of any number of complex situations.

AUTHOR

Dave Gerdes is General Counsel to the South Dakota State Medical Association and practices with the Pierre law firm of May, Adam, Gerdes & Thompson. He is a member of the American Board of Trial Advocates and a charter member of the American Society of Medical Association Counsel. He served as president of the State Bar of South Dakota from 1992-1993, and is currently co-chairman of its Professional Liaison Committee. He also serves as a lobbyist for the SDSMA.

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1. Approximately 15 states have rejected the doctrine, and approximately 19 states have accepted the doctrine. In at least one state, Michigan, the legislature overruled the court's adoption of the doctrine by enacting this statutory amendment:

In an action alleging medical malpractice, the plaintiff has the burden of proving that he or she suffered an injury that more probably than not was proximately caused by the negligence of the defendant or defendants. In an action alleging medical malpractice, the plaintiff cannot recover for loss of an opportunity to survive or an opportunity to achieve a better result unless the opportunity was greater than 50 percent.
2. Benjamin Disraeli, Franklin Pierce Adams. *FPA Book of Quotations*, 1952.

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Teamwork In Healthcare - Go For The Gold!

Janet Fischer, PharmD; Sioux Falls, SD

This past month, the 2000 Summer Olympic games entertained and amazed us. As usual, the USA was one of the leading medal-winning nations. It was striking to note how many gold medals were won in team events – not only in team sports like basketball and softball, but also in relay events in track and swimming. Athletes that may have competed against each other in individual events worked together toward a common goal of earning a team medal.

Similarities can be seen in healthcare. Though sometimes there can be “competition” among health professionals – differences of opinion on how to care for patients or on who makes decisions – in general, the different specialties work well together to care for patients. Teamwork among all healthcare professionals has been a natural outgrowth of the partnership between physician and nurse upon which healthcare is built. This teamwork can take the form of informal, daily interactions or the more formalized cooperation of interdisciplinary teams.

In South Dakota, interdisciplinary teams exist at many sites. One of the first ones formed was a Nutrition Support Team that began in 1980 at one of the state’s larger hospitals. Composed of a pharmacist, dietitian, nurse, and consulting physician, this team was formed with a goal of improving care and reducing complications in patients receiving parenteral or enteral nutrition. Following its success, other teams have been formed in an attempt to improve patient care in other specialized areas. Examples include code blue teams and pain teams on the inpatient side, and mental health teams and geriatric assessment teams on the outpatient side. Most teams are led by a physician or nurse, with other disciplines such as pharmacists, social workers or physical therapists participating as needed.

Pharmacists and physicians, in particular, are well suited to collaborate in patient care. Physicians are experts in diagnosis and treatment options, while pharmacists specialize in drug therapy. A number of recent studies have documented the benefits of pharmacist interaction directly with physicians or on physician-led patient care teams. Two studies from the University of Hawaii School of Medicine focused on the collaboration directly between physicians and pharmacists.^{1,2} They showed that teamwork between the disciplines in an ambulatory primary care clinic resulted in improved reductions in blood pressure and

total cholesterol. Another study in the ambulatory care setting evaluated the addition of a pharmacist to an interdisciplinary heart failure team.³ This study demonstrated that pharmacist participation with the team reduced heart failure events and improved the use of angiotensin-converting enzyme inhibitors. On the inpatient side, pharmacist participation on an interdisciplinary intensive care unit team has been shown to reduce preventable adverse drug events by 66%.⁴

It is not surprising that patient care improves when healthcare professionals work as a team. By drawing on the expertise of the different disciplines, the physician obtains more information about the patient and additional insights and ideas regarding the patient’s care. Also, the time spent with the patient increases. Instead of a 10 to 30 minute physician visit, the patient frequently spends 10 to 30 minutes with each healthcare professional, increasing both the information obtained from the patient as well as the education given to the patient. By working together, the various disciplines learn from each other, which can improve the care provided to all their patients. Finally, communication between the professions is usually better. Mutual respect among the team members facilitates communication. Most interdisciplinary teams have either a conference to discuss and plan patient care or another structured method of communicating their findings and suggestions to the team leader. The sharing of unique information, not obtained by other team members, has been shown to be particularly important in medical decision making.⁵

Though the benefits of formal healthcare teams have been documented, numerous barriers to their formation and function exist. In South Dakota, most collaborative teams exist in urban settings, within large hospitals and clinics. In rural settings, members of the various disciplines with expertise in defined areas may not be readily available. Time is also a significant barrier. It takes time to have multiple professionals evaluating a patient, and team meetings, in particular, can be very time consuming. Money is another factor. Who is going to pay for the involvement of the many disciplines? Medicare is scrupulous in its reimbursement for interdisciplinary ambulatory clinics, and patients may not be able or willing to pay for the services out of their own pockets. Concern by healthcare professionals over


competing roles within teams can also be an obstacle. Physicians, pharmacists, physician assistants, and nurse practitioners can sometimes feel their roles are "threatened" if they need help from other disciplines. Competition between hospitals, clinics, or health systems may also create barriers between various disciplines. Another significant hindrance is communication. Most healthcare professions have developed methods or systems of communication within their disciplines, but systems for communication across disciplines tends to be poor. Even though patient charts have areas for documentation by various professionals, the rest of the healthcare team often does not review them on a regular basis. Time constraints do not allow care conferences on all patients, and as result, important information can be overlooked.


Despite these obstacles, teamwork among healthcare professionals is usually necessary to provide the best of care to patients. Whether it is through the use of formalized healthcare teams or informal collaboration across disciplines, cooperation and communication can significantly improve patient care. Physicians and pharmacists, in particular, can work together to improve the medication therapy of patients. But to do this, healthcare systems need to make changes that facilitate cooperation. Communication systems, specifically, need to be developed or improved. Even though the physician, pharmacist, or other health care professional may not see patients in a "team" setting, each caregiver needs to communicate his/her findings and recommendations to the others, as well as to the patient. In this era of technology, many communication options

exist, but a coordinated system that is accessible to all disciplines would help eliminate this barrier. Technology could also be used to make contact with disciplines not available in rural settings through telemedicine, teleconferencing, or other referral assistance. Additional changes in healthcare practice may also be needed to reduce obstacles to collaborative care. Like Olympic teams that win the gold medal through both their individual skills and their ability to cooperate and communicate as a team, healthcare professionals need to combine their individual expertise in a coordinated way to meet their common goal of improving patient care.


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Sioux Falls native, **Dr. Jeffrey Behrens**, 48, died at Sioux Valley Hospital on September 11, 2000. Born and raised in Sioux Falls, Dr. Behrens graduated from Washington High School, and then joined the US Air Force. He received his medical degree from USD School of Medicine in 1984. Dr. Behrens and his wife, Kathy, lived in San Antonio where he completed his residency in orthopedic medicine at the Brooke Army Medical Center.

Dr. Behrens and his family moved to Sioux Falls where he began his orthopedic medicine practice. He was one of three co-founders of the Sioux Valley Hospital Orthopedic Group in 1999, and was a key member of the development group behind the Orthopedic Center of Excellence.

Dr. Behrens, chairman of the board of the South Dakota Hall of Fame, spearheaded construction efforts for the Hall of Fame building in Chamberlain. Dr. Behrens enjoyed coaching his children in sports, and was on hand to help with injuries if they happened.

Survivors include Dr. Behrens' wife, Kathy, one daughter and two sons, all of Sioux Falls.

Dr. Alan Morris, 64, died September 30, 2000, at his home in rural Sioux Falls. A longtime Sioux Falls physician, Dr. Morris specialized in the treatment of arthritis. Dr. Morris was a graduate of Northwestern University School of Medicine, and served his internship and residency at Wayne State University in Detroit. He went on to study in Stockholm, Sweden, and studied two years as a Fulbright Scholar at the Carolinska Institute. He practiced rheumatology at the University of Missouri in Columbia until 1979, when he and his family relocated to Sioux Falls.

Dr. Morris served as the associate professor in rheumatology with USD School of Medicine and was a member of the American College of Rheumatology, as well as the American College of Physicians. An avid soccer fan, Dr. Morris was a charter member of the South Dakota Soccer Hall of Fame, and an active volunteer in a number of community activities and organizations.

Dr. Morris is survived by his wife, Jo Ann, two daughters and one son.

Dr. Mary Beecher, Madison, has been chosen to serve on the Board of Directors of the South Dakota Academy of Family Physicians. Dr. Beecher was elected to a vice presidential position and will serve on the Board for seven years. She is a 1984 graduate of USD School of Medicine, and completed her residency with the Sioux Falls Family Practice Residency program. Dr. Beecher is a clinical associate professor for the Department of Family Medicine with USD SM, and practices at Interlakes Medical Center in Madison.

* * * * *

The Internal Medicine department of Yankton Medical Clinic, PC, is happy to welcome **Dr. Emad F. Beshai** to its office. Dr. Beshai is Board Certified in Internal Medicine and comes to the clinic from Freeman, where he practiced at Rural Medical Clinics and the Freeman Community Hospital and Nursing Home. In addition to internal medicine, Dr. Beshai has completed training in pediatrics as well as obstetrics and gynecology.

University Physicians welcomes **Dr. Rajesh Singh**. Dr. Singh received his medical degree from Indira Gandhi Medical College in India and completed his psychiatry residency training with USD School of Medicine. Dr. Singh specializes in adult and geriatric psychiatry.

* * * * *

Dr. Tamara Wheeler recently joined the medical/dental staff of Avera Queen of Peace Hospital in Mitchell. Dr. Wheeler received her medical degree from the University of Nebraska College of Medicine in Omaha. She completed an internal medicine internship at St. Joseph Hospital in Omaha, and a radiology residency at Omaha's University Hospital.

* * * * *

Joining the staff at Avera Dakota Family Practice in Parkston is **Dr. Toni VanderPol**. Dr. VanderPol is a Corsica native and recently graduated from USD School of Medicine in Vermillion. She decided to practice in Parkston so she could stay with her rural roots. Dr. VanderPol joins the clinic as a family practice physician.

Dr. Richard I. Porter, Rapid City, recently completed recertification in the American Academy of Family Physicians. By passing the recertification exam, Dr. Porter retains Diplomate status which will remain current for seven years.

Two South Dakota specialty organizations recently elected officers.

The South Dakota Academy of Family Physicians has named Sioux Falls physicians, **Dr. E. Paul Amundson**

as president. Dr. Amundson was sworn into office in early August by Dr. Ross Black, an American Academy of Family Physicians board member.

The South Dakota Chapter of the American College of Surgeons named **Dr. Gregg Tobin**, of Winner, as its new president. Dr. Tobin was sworn into the president's position at the Chapter's annual meeting. The American College of Surgeons is an educational and scientific organization established to raise the standards of surgical practice and improve the care of the patient.



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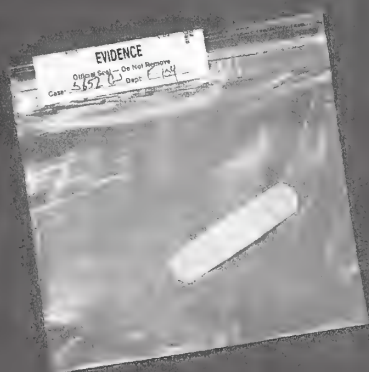


Exhibit A:

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More Than Cholesterol: The Complexity Of Coronary Artery Disease

John Ijem, MD; Carrie Granlie, PharmD

ABSTRACT

There have been many recent articles published that emphasize the fact that cholesterol deposits are only one of many mechanisms through which acute coronary artery disease develops. Recently, a meta-analysis shows that only 14% of acute coronary events occur in stenotic lesions in coronary arteries that are greater than 70% occluded. The majority of acute coronary events (68%) occur in coronary arteries that have less than 50% stenotic lesions.

The acute coronary syndrome is a very complex and unpredictable disease. Recent information now points to the endothelium as a modulating factor in the pathogenesis of coronary artery disease through the production of nitric oxide and angiotensin-II which maintain the homeostatic environment influencing the progression of coronary artery disease. With dysfunctional endothelium there seems to be an imbalance in terms of angiotensin production with regards to the nitric oxide production. This imbalance tends to promote coronary artery disease in individuals who have multiple risk factors. Furthermore, it has been suggested that certain inflammatory compounds are produced in a very dysfunctional endothelium, thereby propagating or leading to acute coronary syndromes. Specifically, this includes C-reactive protein which promotes chronic inflammation at various sites. There are also other acute phase reactants, such as fibrinogen, which may play a role in atherogenesis.

Certain statin drugs, as they are called, tend to ameliorate the levels of the above acute phase reactants, while other statins do not. This reduction of coronary events by statins is independent of the LDL lowering benefits from statin drugs. This article delineates some of the beneficial effects of the different statin agents and points out that all statins are not equal in terms of their known lipid beneficial effects. For the practicing physician, choosing a particular statin agent is important. Some have more drug/drug interaction potential as compared with the others because of their inability to be metabolized through the cytochrome P450 system. There are also some, because of their lipophilic and hydrophilic nature, that tend to enter cells more readily than other statin agents. The effects conferred by these subtle differences among the currently available statins tend to be beneficial in patients with low to moderate levels of LDL cholesterol.

Health care providers have traditionally thought of a myocardial infarction (MI) as being related to the size of the deposits of cholesterol-laden plaques in a coronary artery. More and more evidence is challenging that belief. Falk published a meta-analysis in *Circulation* in 1995¹ showing that in patients who died from a myocardial infarction, only 14% had a coronary artery stenosis of 70% or greater and that the majority (68%) of these patients had a stenosis of less than 50%. High-degree stenosis, greater than 70%, can be identified by stress test or angiogram, but most stenoses of 50% or less are not detectable.¹ Atherosclerotic plaques are the cause of an acute MI, but the size of the plaque is probably not as important

as the stability of the plaque. The pathophysiology of MI is more complex, and is still not fully understood. Well-known cardiologists Peter Libby (Harvard), Eric Topol (Cleveland Clinic), and Valentin Fuster (Mount Sinai) were recently interviewed about the changing thoughts on the complexity and unpredictability of acute coronary events. The physicians stated that it is not a big, detectable blockage in the coronary artery that is likely to kill you. Rather, it is the small, undetectable blockage in the wall of the artery that we cannot detect that is more likely to cause sudden death.

Half of the people who suffer from MI have "normal" cholesterol levels, limiting the predictive value of a cholesterol panel.² Many non-lipid factors

play a role in plaque instability and thrombus formation after a plaque rupture. An infectious bacterium, *Chlamydia pneumoniae*, has been found in coronary plaques, but the role of this organism is uncertain. Inflammation, smooth muscle cell proliferation, and macrophage content and activity within an atherosclerotic plaque are thought to be factors in plaque stability. Endothelial function and nitric oxide (NO) production can play a role in plaque response to changes in blood pressure and vasoconstrictive stimuli. Certainly components of the blood can determine the likelihood of a clot forming if a plaque should rupture, exposing thrombogenic materials in the blood stream. Fibrinogen, plasminogen activator inhibitor-I (PAI-I), platelet deposition and aggregation, and blood viscosity may all affect clotting potential.

Plaque rupture has been compared to a popcorn kernel popping, suddenly choking off the blood supply to the heart. Researchers believe that the body's defense system may be at fault for causing a plaque rupture. Some atherosclerotic plaques have been demonstrated in children who subsequently undergo years of irritation, injury, healing, and reinjury to the endothelium of the arteries. This alters the biology of the artery walls, making the plaques susceptible to rupture.

Our first evidence that heart disease was prevented by lowering cholesterol came from several dietary interventional trials. Dean Ornish has described the outcome from a small trial (35 patients) comparing a normal diet to a vegetarian diet containing only 10% fat (Lifestyle Heart Trial). The patients adhering to the diet for five years were able to reduce LDL cholesterol by 20%. However, no benefits were seen in reducing major cardiac events, such as MI, coronary artery bypass surgery, or death, other than a reduction in percutaneous angioplasty procedures at one to five years.³ The Program on the Surgical Control of Hyperlipidemias (POSCH) trial studied partial ileal bypass surgery, a procedure rarely used now, to reduce cholesterol. The study showed no difference in outcomes of cardiovascular events between control group and surgery group for four years, despite a significant 38% lowering of LDL cholesterol. However, after the fifth year, patients who received the surgical procedure started to demonstrate fewer MIs and coronary deaths.⁴

In cardiovascular event trials using statins, the time to significant reductions in cardiac events is less than one year. In the West of Scotland (WOSCOPS) trial comparing pravastatin 40mg to placebo in hypercholesterolemic men without evidence of coronary disease, reductions in coronary events with pravastatin were seen starting at six months.⁵ In the Long-term Intervention with Pravastatin in Ischemic Disease (LIPID) trial, pravastatin 40mg was compared

to placebo in men and women with established coronary disease and average cholesterol levels (average LDL-C was 150mg/dl). The patients randomized to pravastatin started to receive benefit at seven months.⁶ In the Scandinavian Simvastatin Survival Study (4S), benefits with simvastatin were seen starting at one year.⁷ These trials demonstrate that statins have an effect on reducing cardiac events other than simple cholesterol reduction.

Paul Ridker has completed research measuring high-sensitivity C-Reactive Protein (hs-CRP) and its correlation with cardiovascular disease. Male and female individuals at highest risk for coronary disease are those patients with a high level of hs-CRP.⁸⁻¹² Like other tests for CRP, hs-CRP is a non-specific test for inflammation. In the Cholesterol and Recurrent Events (CARE) study, patients having an hs-CRP level in the 90th percentile and higher, indicating the presence of inflammation, were three times as likely to suffer a second coronary event compared to controls. These patients with high hs-CRP that were randomized to pravastatin compared to placebo had a 56% reduction in clinical events and a 21.6% reduction in the median hs-CRP levels. The changes in hs-CRP were not correlated to changes in LDL cholesterol, meaning that hs-CRP is truly a non-lipid risk marker.¹² There is no published information on effects of statins other than pravastatin on hs-CRP.

The smooth muscle myocyte proliferation may play a role in plaque stability. Smooth muscle cells provide flexibility and solidity under the fibrous cap of an atherosclerotic plaque. Pravastatin is hydrophilic and does not inhibit smooth muscle cell growth, probably due to its inability to diffuse through the cell membrane.¹³ All other statins are significantly more lipophilic and inhibit smooth muscle cell growth.¹⁴

Various factors affecting hemostasis can determine whether a ruptured plaque will cause mild anginal symptoms or a full-blown MI. The size of the blood clot formed when a plaque ruptures may cause a slight disruption in blood flow to the myocardium depending on the degree of occlusion caused by the clot. Many factors will determine clot size, including macrophage lipid content and activity within a plaque, PAI-I, fibrinogen, platelet deposition and aggregation, blood viscosity, the presence of diabetes, or a history of smoking can influence clot formation.

Fibrinogen has been identified as an independent risk factor for coronary atherosclerosis. The most prescribed statin, atorvastatin or Lipitor, raises fibrinogen levels by as much as 60% above baseline.¹⁵⁻¹⁷

Simvastatin and lovastatin have a minimal effect on fibrinogen, and pravastatin generally lowers fibrinogen

levels from baseline.¹⁸⁻²¹ Pravastatin, but not simvastatin, reduces the size of thrombus that is formed in both high and low shear rates.²²

The mounting evidence showing that coronary disease is more than cholesterol is challenging what physicians and other health care providers believe. It is important to rely on evidence from outcome trials that have proven a medication or intervention does more than lower cholesterol, that it actually reduces coronary events.

ACKNOWLEDGEMENT

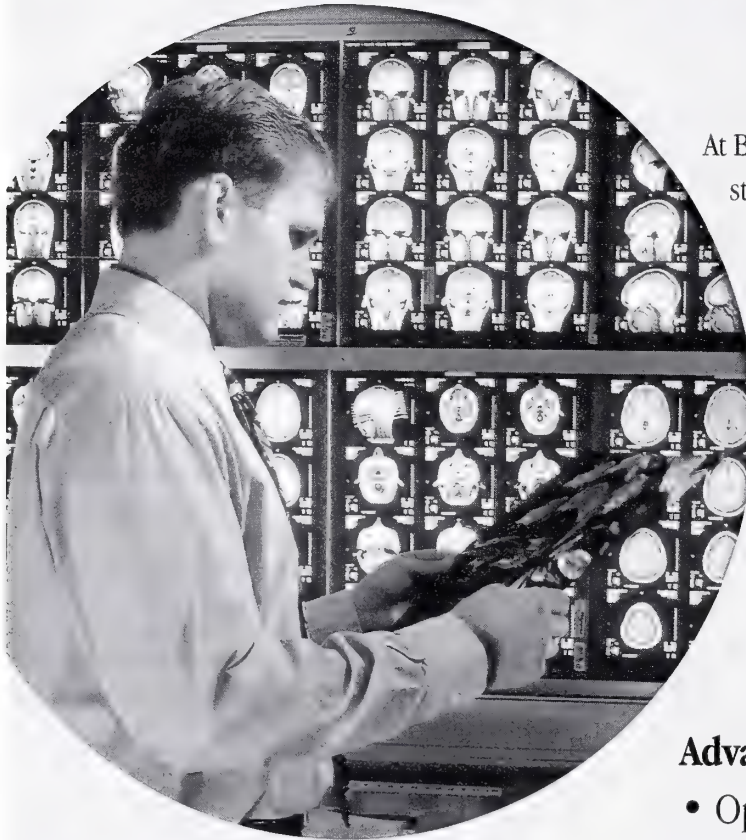
I want to express my thanks to Amy Jenkins for preparing the manuscript.

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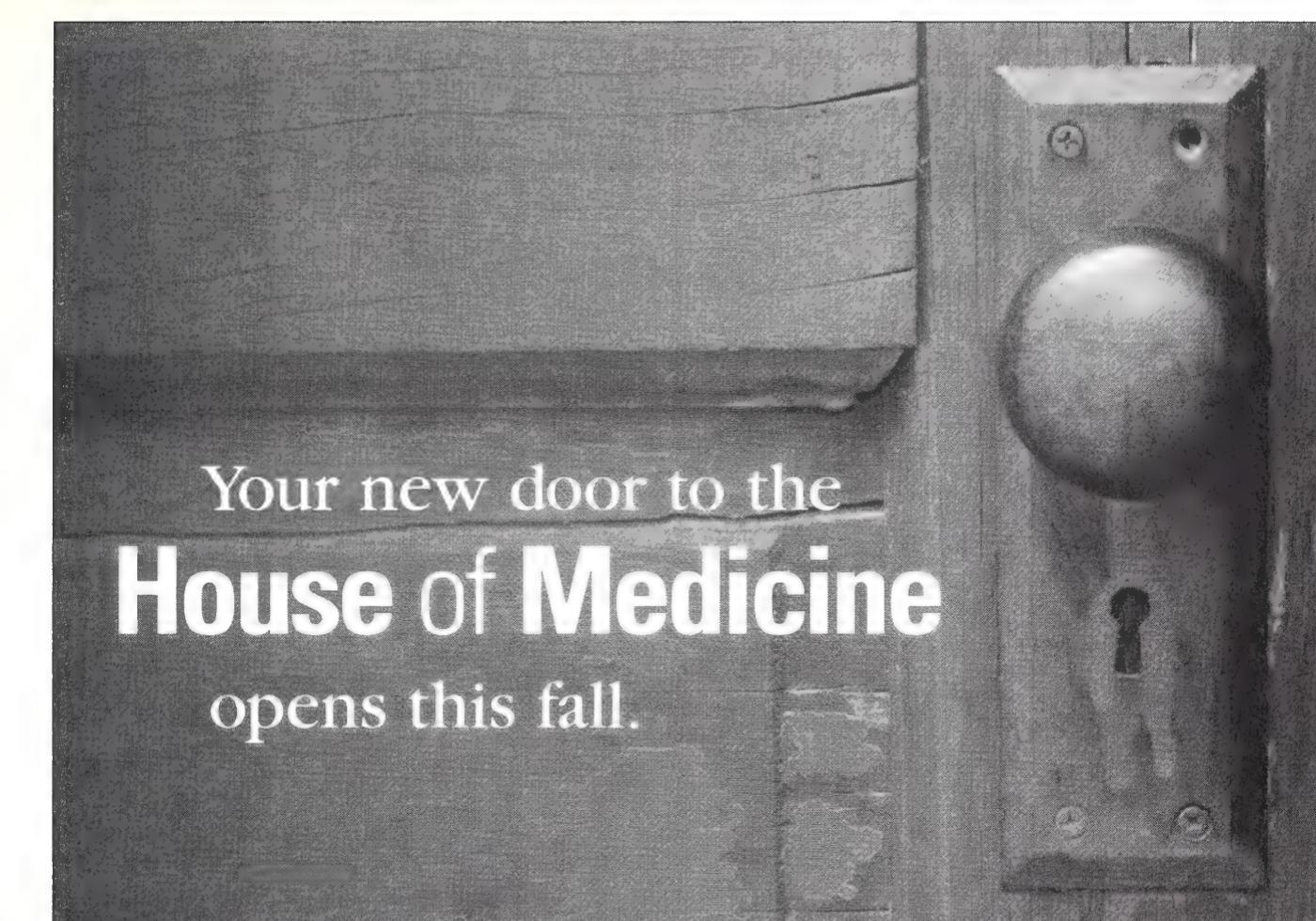
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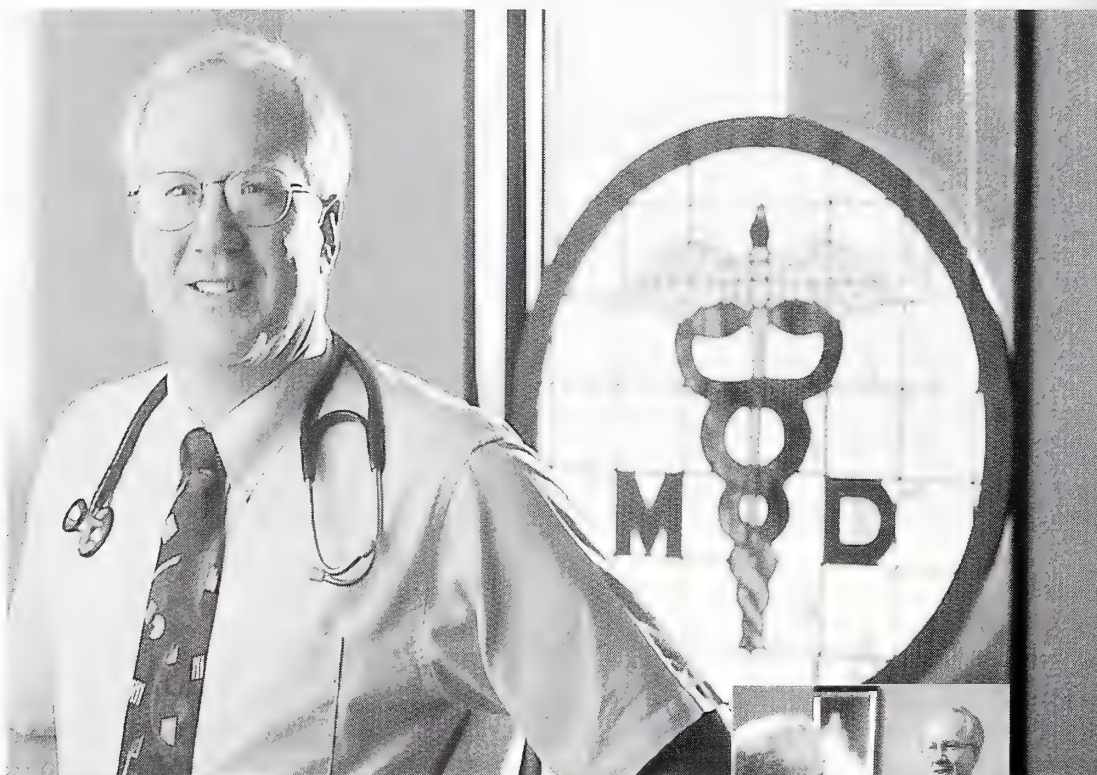
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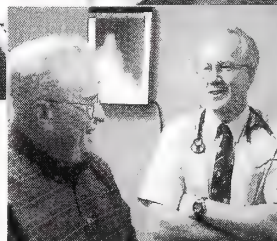
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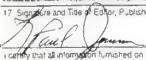
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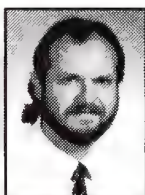
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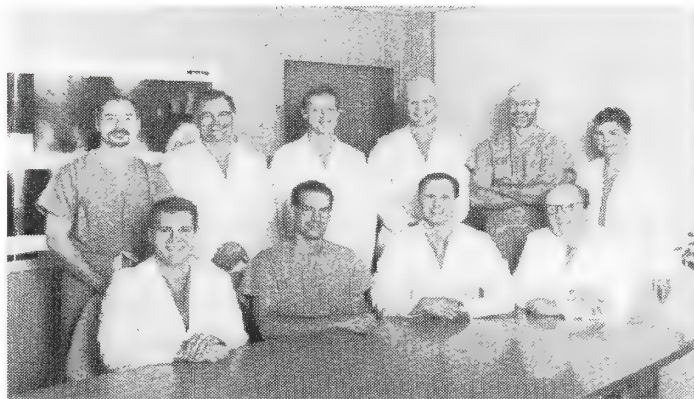
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CME Conferences

CME Conferences being held on a regular basis at various health care facilities throughout the state of South Dakota. (1 hour AMA Category 1 credit unless otherwise specified.)

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced;
Info: Sharon Sulzbach, 347-7145.

NOVEMBER 2000

- Nov 15 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 15 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Nov 15 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 16 **USDSM Audio Conference** - 12:00 PM; (CST)/11:00 AM (MST); Speaker: Richard H. Grimm, Jr MD PhD; Topic: Goals for Hypertension Treatment in the New Century; for more information on this series, contact Lynn Thomason at the Office of CME, 357-1480.
- Nov 16 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 16 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Nov 16 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas 333-3114.
- Nov 16 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Nov 17 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Nov 17 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Nov 18 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Nov 20 **Sports Medicine Grand Rounds - Sponsored by Avera McKennan and the Sports Medicine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Nov 21 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Nov 21 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Nov 21 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Nov 22 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 22 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 23 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 23 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Nov 23 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Nov 23 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Nov 24 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Nov 25 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Nov 27 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Nov 28 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Nov 28 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

- Nov 29 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Nov 29 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Nov 30 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Nov 30 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.

DECEMBER 2000

- Dec 1 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Dec 1 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Dec 1 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Dec 2 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Dec 5 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Dec 5 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Dec 6 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Dec 6 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing, MD 331-3490.
- Dec 6 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Dec 6 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Dec 6 **Spine Grand Rounds - Sponsored by Avera McKennan and the Spine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand, 339-6832.
- Dec 7 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Dec 7 **Grand Rounds** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Dec 7 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Dec 8 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Dec 8 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Dec 9 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Dec 11 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Dec 11 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Dec 12 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Dec 12 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8108.
- Dec 12 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Dec 13 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Dec 13 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Dec 13 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN 333-1000.
- Dec 14 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.

- Dec 14 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.
- Dec 14 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Dec 15 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Dec 15 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Dec 15 **Sports Medicine Grand Rounds - Sponsored by Avera McKennan and the Sports Medicine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Dec 16 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Dec 19 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Dec 19 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Dec 19 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Dec 20 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Dec 20 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Dec 20 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Dec 21 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Dec 21 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Dec 21 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas 333-3114.
- Dec 21 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Dec 22 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Dec 23 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Dec 25 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Dec 26 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Dec 27 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Dec 27 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Dec 28 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Dec 28 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Dec 28 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Dec 28 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Dec 28 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Dec 30 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

MISCELLANEOUS

NOVEMBER 2000

- Nov 11 **Avera Cancer Institute's 2nd Annual Oncology Symposium 2000**, Radisson Encore Inn, Sioux Falls, SD. 6.5 hrs AMA Category 1 credit. Contact Robin Wright, Avera McKennan, 1001 E 21st St, Sioux Falls, SD 57105. Phone: 605/322-8950. Fax: 605/322-8951. Email: robin.wright@mckennan.org.
- Nov 16-18 **Vestibular Labyrinth in Health and Disease (Otolaryngology)**, EPN Education Ctr, Washington University Medical Ctr, St. Louis, MO. Fee: \$445. 20 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.

- Nov 17 **ASTRO Presentations (Radiation/Oncology)**, EPN Education Ctr, Washington University School of Medicine, St. Louis, MO. Fee: \$95. 7.5 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Nov 30-Dec 2 **The 32nd Interpretation and Treatment of Cardiac Arrhythmias**, Philadelphia, PA. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.

DECEMBER

- Dec 1-2 **Fingers to Toes: Comprehensive Orthopaedic Review for Primary Care Providers**, EPN Ed Center, Washington Univ Med Ctr, St. Louis, MO. Fee: \$325. 14 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Dec 3-6 **The 28th Annual Williamsburg Conference on Heart Disease**, Williamsburg, VA. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Dec 8 **The Third Annual Contemporary Women's Health Issues**, EPN Education Ctr, Washington University Medical Ctr, St. Louis, MO. Fee: \$445. 20 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Dec 9 **Cardiology**, EPN Education Ctr, Washington University Medical Ctr, St. Louis, MO. Fee: \$445. 20 hrs AMA Category 1 credit. Washington Univ School of Med, CME, Campus Box 8063, 660 S Euclid Ave, St. Louis, MO 63110-1093. Phone: 314/362-6891. Fax: 314/362-1087. Email: CME@msnotes.wustl.edu.
- Dec 11-13 **Advanced Echocardiography: Case Studies and Concepts**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Dec 15-17 **The 33rd Annual New York Cardiovascular Symposium**, New York, NY. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Dec 15-17 **The 17th Advances in Heart Disease**, San Francisco, CA. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.

JANUARY

- Jan 15-19 **The 32nd Annual Cardiovascular Conference at Snowmass**, Snowmass, CO. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 18-20 **Problem Solving in Interventional Cardiology**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 19-21 **The 15th Annual Clinical Nuclear Cardiology: Case Review with the Experts**, Los Angeles, CA. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 21-26 **Survival of the Fittest: Giving Your Hospitals a Real Advantage**, Grand Wailea Resort, Hotel & Spa, Maui, HA. Fee: \$1,395. 20 hrs AMA Category 1 credit. Estes Park Institute, PO Box 400, Englewood, CO 80151. Phone: 800-727-8225. Fax: 412/798-9217.
- Jan 22-24 **Advanced Echocardiography: Illustrative Case Studies and Latest Techniques**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 22-26 **Reconstructive Surgery of the Upper and Lower Extremity: A Comprehensive Review**, Westin Hapuna Beach Prince Hotel, Mauna Kea Resort, Kohala Coast, Big Island of Hawaii. Fee: \$895. 27 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800-323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Jan 25-27 **Comprehensive Review of Echo and Nuclear Imaging in Ischemic Heart Disease**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800-253-4636 ext 694. Fax: 301/897-9745. Internet: www.acc.org.

- Jan 26-28 **The 20th Annual Perspectives on New Diagnostic and Therapeutic Techniques in Clinical Cardiology**, Lake Buena Vista, FL. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
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SOUTH DAKOTA

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WELCOME

BOB OATFIELD, MD



Bob Oatfield, MD,
FACC, FACP, FCCP
Heart Partners

Dr. Bob Oatfield, an interventional cardiologist has begun practicing with Heart Partners.

Dr. Oatfield is a graduate of Loyola University of Chicago – Stritch School of Medicine. He completed his residency at Cedars - Sinai Medical Center in Los Angeles and his cardiology fellowship at St. Vincent's Medical Center also in Los Angeles. Dr. Oatfield is board-certified in Internal Medicine and Cardiology.

He is a retired Colonel from the Army. While in the Army, he served as Chief of Cardiac Service at Martin Army Community Hospital in Fort Benning, Georgia. Most recently, Dr. Oatfield worked at the Heart & Lung Clinic in Bismarck, North Dakota.

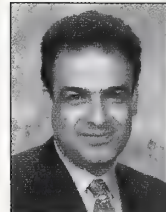
As an interventional cardiologist, Dr. Oatfield performs procedures such as angioplasty and stents in cardiac catheterization lab that reduce the size of blockage in arteries.

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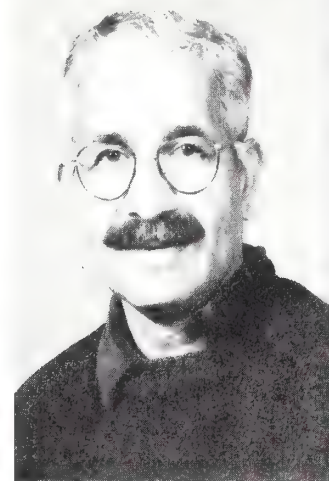
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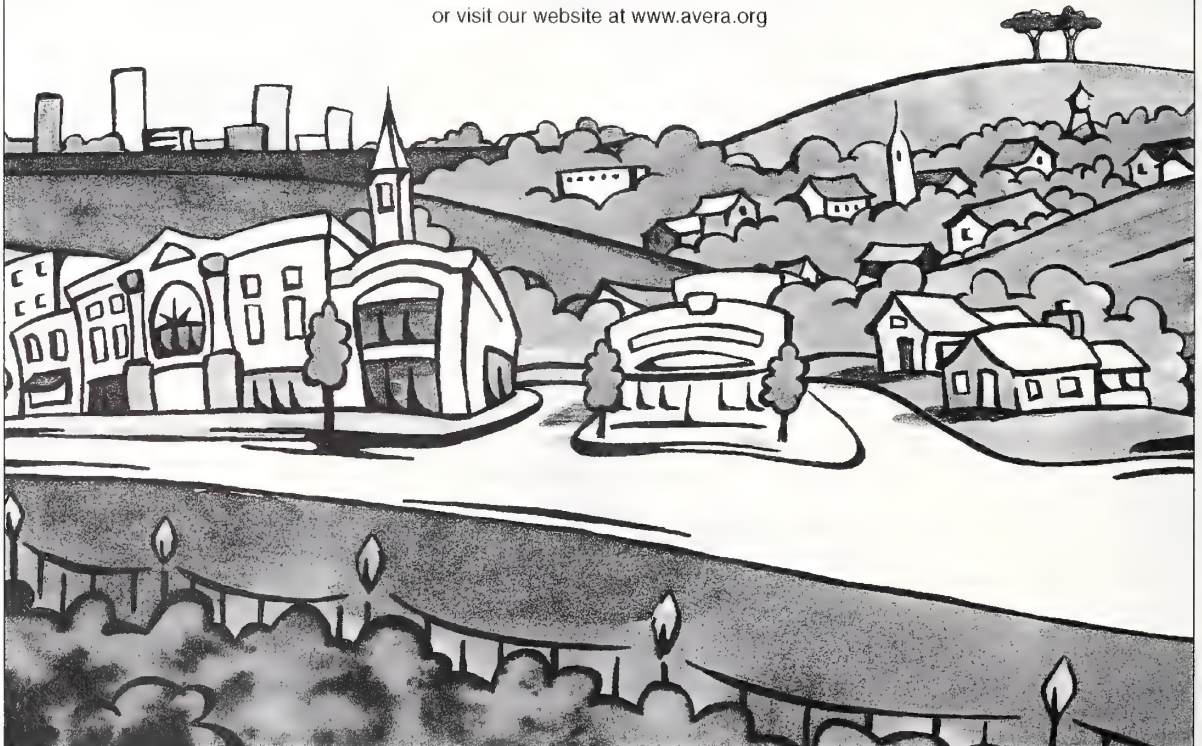
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*Excerpt from a pastoral letter on healthcare
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About the Cover

This photo of two bluejays frolicking in the snow was taken by Dr. Younes Bakri, formerly of Brandon, SD.

President's Page



**Stephen H. Gehring, MD, President
South Dakota State Medical Association**

Christmas 1967 was the last Christmas of an era. The year 1967 may have been the “summer of love” in San Francisco, but the Fifties died slowly in Philadelphia. The nurses wore caps and stood up when an intern entered the nurses’ station. The interns (not PG-1s) wore white pants and addressed the attending as “sir.” The attending wore suits and told the interns about adventures of house calls.

My attending, Dr. Henry Sahl, was about 50 years old, short and round. Several days before Christmas he received an evening phone call from a frantic family, a family unknown to him. The father had chest pain. Henry drove to the neighborhood, parked and walked the wet sidewalks looking for the small house. He carried the official black bag in one hand and a heavy wooden boxed EKG machine in the other. (You have to remember that CCUs were in their infancy and bypass surgery was unknown, and so infarcts were treated much less urgently.) He entered the narrow row house to the family’s relief and was escorted up the L-shaped

stairway to the front bedroom, still lugging his equipment. After examining the patient he did an EKG, a painstaking procedure requiring straps, jelly and multiple positioning of electrodes. After the examination he returned to the downstairs front room and told the waiting family the good news - it was nothing serious. The overjoyed family tried to pay him (indeed a different era) but Henry, who incidentally was Jewish, said, “It’s Christmas. Let this be my Christmas gift to you.”

Times have changed since that true incident occurred. Clothing styles have changed, house calls are rarer, time demands on physicians are greater and insurance companies interject themselves between doctors and patients. However, the hidden lesson of the story remains true. Though Henry was unaware of it, his house call was a gift to himself as well as to the family. For physicians, helping people is still our best reward.

Christmas is a time for reflection on the priorities of life. We need to remember that we went into medicine because physicians can do remarkable things for people. We can’t let the problems within medicine erase the joy of actually helping someone by using our knowledge and abilities. This year give yourself a Christmas present. Take the time to reminisce about those special occurrences when you really made a difference.

May you and your family have a
Merry Christmas and a Happy New Year!



**Karen Waltman, President
South Dakota State Medical Association Alliance**

As the 2000 holiday season unfolds, families are getting together, memories are being made and the happiness of this meaningful time of year abounds. This is a familiar scene for many of us. We are fortunate, but there are those not as fortunate. They literally feel the stress of the season and fear for their own safety and what tomorrow may bring. Domestic violence has startling statistics as compiled by the National Coalition Against Domestic Violence.

- A woman is beaten every 9 seconds. That is 400 every hour and 9,600 every day, over 3.5 million a year.
- In America, 1 out of every 2 women will be involved in a violent relationship in their lifetime. This does not mean that one out of 2 men are abusive; only that batterers tend to go through many relationships without intervention to stop the violence.
- Only 1 out of 10 acts of domestic violence are reported.
- More than three million children witness acts of domestic violence every year.

- Approximately 70% of the people who assault their partners grew up in a violent home.
- Battering causes 21% of the visits by women to the emergency rooms - which means that 1.5 million women seek emergency medical treatment each year due to domestic violence.

This is alarming information which "brings home" the point that responsible individuals and entities need to become more involved in positively impacting these societal issues.

Several years ago, the SDSMA Alliance made a decision to become involved in this pressing issue. The "FACE THE PROBLEM" marketing campaign was developed which includes print and electronic media and continues to offer an alternative to those in need of assistance. An 800-430-SAFE Hotline is offered, which guides callers to locations in their area in the state where help can be found. If you would like to assist in distributing "FACE THE PROBLEM" posters, Take One 800-430-SAFE cards, and/or related information in your area, please call me at 605/342-2123. Radio and television stations across the state will be airing the public service announcements in the next few months. Additionally, several state Alliances are now utilizing the SDSMA Alliance "FACE THE PROBLEM" marketing campaign in their states. We are indeed continuing in our cause to help "FACE THE PROBLEM."

There are other ways an adult can help to end domestic violence.

Some include:


- Model a non-violent, respectful response to resolving conflicts in your family.
- Cultivate a respectful attitude toward women in your family and at your workplace.
- Learn about domestic violence services in your community. Contribute your time (volunteer) resources, or money.


- Ask that physicians and other health care professionals receive training about domestic violence and follow the diagnostic and treatment guidelines about domestic violence, child abuse, and elder abuse developed by the American Medical Association.

In partnership with the South Dakota State Medical Association, the "FACE THE PROBLEM" campaign was developed. It is now up to each and everyone of us to identify and respond to violence that is encountered. Help this holiday season by calling your local shelter and/or elder care facility to volunteer your time or resources. You will not only provide vital help but will enrich your own holiday as well.


Karen Waltman

1. National Resource Center on Domestic Violence and the National Domestic Violence Awareness Project. June 2000.







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Substance And Symbolism

Atension can exist between innocence and experience. Sometimes a transition from innocence is seen as reflecting the natural process of maturation. In other instances, experience can be construed as tarnishing innocence. Indeed, the fate of innocence can be perceived as an unavoidable confrontation with evil that necessitates irrevocable change. Multiple works of literature have explored this theme.

In his graduation poem for the medical students at Emory University, John Stone noted, "For this is the day you know too little against the day when you will know too much . . ."¹ With this phrase, Stone appears to be reflecting upon the medical student's transition from innocence to experience.

Another literary consideration of the topic is found in William Blake's *Songs of Innocence and of Experience*.² Blake, an 18th Century poet and artist, contrasted pristine, pastoral experiences with reflections on the evil and suffering that are encountered in the world. One of his most famous poems from the songs of experience is "The Sick Rose." In this work he describes the rose as attacked by an invisible worm that "Does thy life destroy." Clearly, these lines seem to reflect the inevitability of illness and decay. Another of Blake's pieces is "The Tyger." This poem begins:

Tyger Tyger, burning bright
In the forests of the night;
What immortal hand or eye,
Could frame thy fearful symmetry?

This work consists of a series of unanswered questions. By analogy, it might well mirror the experience of medical students. On the one hand, students of medicine learn to marvel at intricacies and subtleties of the body, akin to the tyger's "fearful symmetry." And yet just as in Blake's poem, medical students may frequently be left with unanswered questions: which of several treatments should be used; how does one deal with ethical and emotional turmoil often seen with illness; how does one cope with the prospect of making mistakes?

Inevitably, as medical students progress in training, there are tales of both innocence and experience. Anecdotes abound that suggest that some medical

students become cynical and hardened by their schooling. Compassion and empathy for the patient can yield to detachment and the rote performance of procedures. A notable challenge for both medical students and their educators is the issue of how to promote the students' songs of innocence and experience so that they ultimately contribute to professionalism and an appreciation of medicine. Or to pose the issue somewhat differently, how can faculty work to ensure that the same enthusiasm that first year medical students bring to their initial days of medical school will still be present as they prepare to graduate four years later?

It seems to me that an important way for medical students to process the transition from innocence to experience is to repeatedly focus on the ideals of the profession. Such an emphasis can start with the actual student orientation to medical school. At the University of South Dakota School of Medicine a three day orientation for students has, for the last five years, culminated in a "White Coat Ceremony." This program is championed by the Arnold P. Gold Foundation and since 1993 many medical schools have adopted it. The purpose of the ceremony is to help instill in the students the sense of professionalism and humanism. Faculty members address the students and their families. The students then come forward to officially receive their white coats. The physicians present, as well as the students, read aloud the Affirmation of the Physician, the oath traditionally used at medical school commencement.

This type of official orientation ceremony can help medical students begin the process of transition from the relative innocence of their undergraduate studies to the intense clinical experiences that will help mold their future practice styles. On one level, of course, the white coat is a mere badge to signify professional student status. However, if the white coat ceremony is effective in focusing the students upon the honored profession they are joining, the program can truly serve as a solemn initiation.

With the White Coat Ceremony the students are offered the expectation that their songs of innocence and experience will ultimately celebrate their privilege of caring for patients. Their melodies will reflect the

nuances of each patient's narrative and accompany the students as they deal with the complexities of illness care. Hopefully, their songs will not become bitter and disillusioned. Inevitably, all innocence is tarnished by exposure to the stern realities of life. But the songs of clinical experience can champion the human spirit and foster commitment to the belief that we do make a difference in people's lives.

Jerome W. Freeman, MD
Editor

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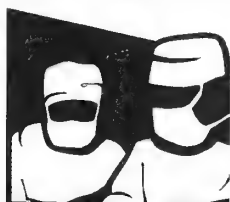
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*Seasons Greetings from the
South Dakota State Medical Association*

Olanzapine To Treat The Acute Mania Of Bipolar Disorder

Paul L. Price, PharmD

In March of this year, the FDA (U.S. Food and Drug Administration) approved the use of olanzapine for the short-term treatment of acute manic episodes associated with bipolar disorder. The question arises as to why this is an important addition to the group of medications used to treat acute manic episodes when antipsychotic medications have been used in this capacity for several years.¹

First, "What is bipolar disorder type I"? Bipolar disorder, formerly known as manic-depressive illness, is a lifelong disease characterized by extremes of mood. These patients experience both very elevated moods (mania) and very low moods (depression), either of which can be accompanied by psychotic features. Mania includes marked euphoria, grandiosity, increased sex drive, involvement in dangerous and sometimes illegal activities, and drug and alcohol abuse. Bipolar disorder affects roughly four million people in the United States, and approximately 25% of people with this disease attempt suicide at some point.²

The mainstay of treatment for this disorder has included the mood stabilizers lithium, valproate, carbamazepine, with benzodiazepines and typical antipsychotics as adjunctive treatments.² Currently, in clinical practice, the primary drug treatments include lithium and valproate in the management of bipolar disorder (mania) acutely and chronically with typical antipsychotics and benzodiazepines used in the short term management of the symptoms of mania.³ With the recent approval of olanzapine for the treatment of acute manic episodes there is now an alternative to the previously used medications, but does it have any advantages in this arena over existing treatments?

Olanzapine offers less likelihood to produce extrapyramidal symptoms and tardive dyskinesia when compared to some of the typical antipsychotic medications, and it does not require blood level monitoring as compared to the mood stabilizers.² Olanzapine has been shown to be as effective as lithium in the treatment of mania in one short (4 week) study.¹ Two other short term (3 week and 4 week) placebo-controlled trials with patients diagnosed with bipolar I disorder according to DSM-IV (Diagnostic and Statistical Manual of Mental Disorders Fourth Edition) criteria who displayed an acute or mixed episode with or without psychotic features showed the efficacy of olanzapine.⁴ Further advantages may include the

availability of a rapidly dissolving tablet for assurance of compliance with the medication which can be a problem with this group of patients. In the future, an injectable form of olanzapine may also be available.⁵

Data on long-term use of this medication is lacking for acute mania (beyond 4 weeks) and for the prophylaxis of mania. Therefore, in either of these settings one needs to monitor the drug's use closely. Other potential disadvantages include a higher cost when compared to other traditional medications for this use. Also, the approved dosage, which ranges from 5mg to 20mg,⁴ appears to be lower than what is being used by some clinicians without any supporting information in the literature to date. This medication also is not without its own side effects. Most notably, somnolence, dry mouth, dizziness, asthenia, constipation, dyspepsia, increased appetite, and tremor have been documented in trials.⁴

Thus, the question still remains, "Where does olanzapine fit as a treatment choice for acute mania"? At this point, its place in therapy would appear to be for those patients who cannot tolerate the more traditional agents or who have not been successfully treated with the traditional agents. As more data becomes available, olanzapine could become regarded as a first-line agent in the treatment of acute mania, and possibly maintenance treatment of bipolar disorder as well.


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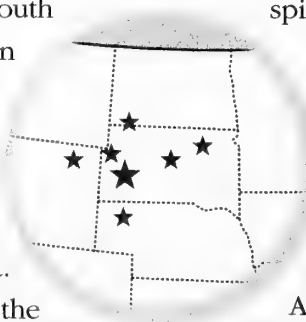
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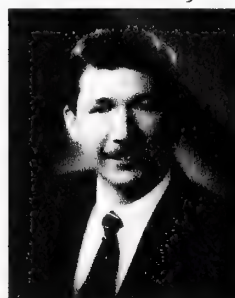
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Kawasaki Disease: A Diagnostic Challenge

Archana Chatterjee, MD, PhD; Jordan Leonard, MD; Sami Awadallah, MD; James Matsuda, MD

ABSTRACT

Kawasaki disease (KD) is an acute, self-limited, febrile, multi-system vasculitis that predominantly affects the pediatric population, and is the leading cause of acquired heart disease in children. No etiologic agent for the disease has been identified, there are no diagnostic tests available, and the diagnosis is established by fulfilling a defined set of clinical criteria. We report on a 9-year-old boy who presented initially with symptoms felt to represent a streptococcal infection. He was subsequently shown to meet the criteria for KD, developed cardiac complications of the disease and subsequently demonstrated recovery over a year's period of time. The diagnostic criteria for KD, differential diagnosis, pitfalls in diagnosis, therapeutic recommendations and outcomes are discussed with relevance to this case. Recent print and electronic information sources and references are provided.

INTRODUCTION

Kawasaki Disease (KD) is an acute, self-limited, febrile, multi-system vasculitis that predominantly affects the pediatric population. Its importance lies in the fact that it is the leading cause of acquired heart disease in children. Coronary artery aneurysms or ectasia develop in approximately 20% of untreated children with the disease.¹ The peak incidence of this disease is between the ages of 1 and 2 years, with 80% of cases occurring before 4 years of age.² First described in Japan by Dr. Tomisaku Kawasaki,³ the disease is now known to occur in both endemic and epidemic forms worldwide. Although clinical and epidemiologic features of the disease suggest a microbial source, the precise etiologic agent remains a mystery. As a result, no diagnostic test currently exists for KD. Instead, the diagnosis is established by fulfilling the clinical criteria described in Kawasaki's original paper and also by excluding other diagnoses. We report on a 9-year-old-boy who presented initially with symptoms felt to represent a streptococcal infection, was subsequently shown to meet the criteria for KD, developed cardiac complications of the disease and demonstrated recovery over a year's period of time.

CASE HISTORY

A previously healthy 9-year-old boy presented with a five-day history of injected sclerae and a two-day history of low-grade fever, pharyngitis, bilateral anterior cervical lymphadenopathy, and a

Table 1

Hospital day	Evaluation/Result
Admit	WBC: 16,200/ μ l with 85% segs, 6% lymphs, 3% eos, 6% monos Hgb 10.6 mg/dl, Hct 30.7%, platelets 336,000/ μ l, ESR 50mm/h Electrolytes (mEq/l): Na 134, K 3.9, Cl 94, CO ₂ 22 Urea 9 mg/dl, Creatinine 0.3 mg/dl, Ca 8.5 mg/dl SGOT 33 IU/l, total protein 6.7 g/dl, albumin 3.2 g/dl Urinalysis: 3-5 WBC/hpf, otherwise normal MRI hips: bilateral effusion with no evidence of septic arthritis CXR: normal Blood cultures: no growth at 5 days ASO titer: 533 IU/ml
3	Prealbumin <7 mg/dl ESR 66 mm/h Nasal swab culture: no growth at 72 hours CMV titers: consistent with no evidence of primary or past CMV infection EBV titers: consistent with no evidence of primary or past EBV infection Rheumatoid factor: negative EKG: normal sinus rhythm
8	WBC: 19,200/ μ l with 62% segs, 27% bands, 3% lymphs, 1% eos, 7% monos Hgb 8.4 mg/dl, Hct 24.7%, platelets 546,000/ μ l, ESR >150mm/h Electrolytes (mEq/l): Na 133, K 4.0, Cl 104, CO ₂ 22 Urea 8 mg/dl, Creatinine 0.7 mg/dl, Ca 8.1 mg/dl SGOT 30 IU/L, total protein 7.0 g/dl, albumin 1.7g/dl Urinalysis: 1+ albumin, otherwise negative Blood cultures: no growth at 5 days Urine culture: no growth at 48 hours CT scan neck: extensive left jugular chain adenopathy with jugulodigastric node measuring 3cm and showing signs of central necrosis/abscess formation CT scan chest: parenchymal opacification in left lower lobe CT scan abdomen: spleen measuring 11 cm, normal liver and gallbladder, two areas of low attenuation in left kidney, small amount of free fluid, small bilateral joint effusion of hips EKG: sinus tachycardia with non-specific T-wave changes Echo: right coronary artery diffusely dilated with maximum diameter of 4.5mm, left coronary artery diffusely dilated with maximum diameter of 4.0mm, small pericardial effusion, mild mitral insufficiency, slightly depressed left ventricular systolic function
10	C-reactive protein 22.4 mg/dl
14	WBC: 14,800/ μ l with 48% segs, 19% bands, 21% lymphs, 5% eos, 3% monos Hgb 8.7 mg/dl, Hct 25.7%, platelets 288,000/ μ l, ESR 130 mm/h C-reactive protein 7.1 mg/dl Salicylate level 7.9 mg/dl CXR: cardiothymic silhouette enlarged at 11.5 cm in transverse dimension
16	Electrolytes (mEq/l): Na 135, K 4.7, Cl 104, CO ₂ 20 Urea 14 mg/dl, Creatinine 0.4 mg/dl, Ca 8.8 mg/dl SGOT 66 IU/L, total protein 8.2 g/dl, albumin 2.3g/dl EKG: normal Echo: right coronary artery shows tubular dilatation with a maximum diameter of 5.0mm, left coronary artery shows tubular dilatation with maximum diameter of 5.5mm, mild atrial and mitral valve insufficiency, no pericardial effusion or coronary artery stenosis appreciated

Figure 1



Photograph of the patient taken during the first week of the illness, demonstrating non-purulent conjunctivitis, erythema, dryness and fissuring of lips.

nonpruritic rash. He was evaluated by his primary care provider and diagnosed with streptococcal pharyngitis based on a throat swab positive by rapid antigen testing. He was prescribed amoxicillin at 30mg/kg/day in divided doses. He remained febrile and developed several episodes of emesis. He returned to his provider the next day when a white blood cell count of 9600 per UL, with 51% lymphocytes, 43% segmented neutrophils, 39% bands, and 4% monocytes was noted. He was continued on the amoxicillin and over the course of the next two days developed joint pain, desquamation of his lips and extremities, worsening rash and persistent pharyngitis.

He was referred to a pediatrician who admitted him to the hospital with the diagnosis of streptococcal pharyngitis with scarlet fever. He was started on intravenous clindamycin at 30 mg/kg/day and ampicillin/sulbactam at 120 mg/kg/day in divided doses. Hospital laboratory and radiographic evaluations are summarized in Table 1. Figure 1 is a photograph taken by his pediatrician during the acute phase of the illness, demonstrating the typical mucous membrane changes. He continued to have daily high-grade fevers despite antipyretic therapy, reaching a maximum of 103.8°F. Clinical signs of injected sclera, swollen lips, cervical adenopathy, and scarlatiniform rash continued despite dual antibiotic therapy. In addition, he developed a systolic ejection murmur and an S₄ gallop. On the third day after admission, the patient was diagnosed with KD, about 12 days after the onset of fever. He was immediately started on aspirin at 100 mg/kg/day and given intravenous gamma globulin (IVGG) at 2g/kg. He continued to spike fevers as high as 103.4°F, and

was given a second dose of IVGG on the fifth day after admission.

Due to persistent fever with decreased oral intake, he was transferred to a tertiary care facility. There he was continued on high dose aspirin therapy, clindamycin at 35mg/kg/day and ampicillin/sulbactam at 150mg/kg/day of the ampicillin component. An echocardiogram was obtained that showed evidence of diffuse coronary artery dilatation. His fevers persisted until he was given scheduled acetaminophen and ibuprofen. On the 11th day after admission, total parental nutrition was started to improve his nutritional status. His antibiotics were discontinued after twelve days of therapy. Over the next several days, he gradually improved with resolution of rash, fever and other symptoms. A follow-up echocardiogram on the 16th day after admission showed evidence of slightly

increased coronary artery dilatation. He was continued on high dose aspirin until his C-reactive protein normalized, then switched to antiplatelet doses of aspirin for one year.

An echocardiogram obtained two months after the onset of his illness showed a tubular aneurysm of the anterior descending branch of the left coronary artery. At one-year follow-up, there was considerable resolution of his aneurysm with no sequelae.

DISCUSSION

This case demonstrates the challenges involved in making the diagnosis of KD in older patients and those whose symptoms are somewhat atypical. Due to its unknown etiology and lack of specific diagnostic tests, KD is diagnosed based on clinical criteria developed by the Japan Kawasaki Disease Research Committee and adopted subsequently by the Centers for Disease Control (CDC) and the American Heart Association (AHA).⁴⁻⁶ The case definition is a fever lasting five days or more unexplained by other known disease process and four of the following five criteria:

- (1) Bilateral conjunctival injection without exudate
- (2) At least one of the following mucous membrane changes:
 - a. injected or fissured lips;
 - b. injected pharynx; or,
 - c. strawberry tongue
- (3) At least one of the following extremity changes
 - a. erythema of the palms or soles;
 - b. edema of the hands or feet; or,

- c. periungual desquamation (usually occurs in the convalescent phase of illness)
- (4) Polymorphous exanthem, primarily involving the trunk - may be maculopapular, urticarial, scarlatiniform or erythema multiform.
- (5) Acute nonsuppurative cervical lymphadenopathy (at least one node 1.5cm or larger in diameter).

The first four criteria are present in approximately 90% of patients with KD, while cervical adenopathy is observed in 50% to 75% of patients.⁷ There are a number of non-cardiac clinical and laboratory findings associated with KD which are nonspecific, but may assist in establishing the diagnosis.⁷ If coronary artery abnormalities are detected by echocardiography, the diagnosis can be made with fever and three other criteria.⁸ Experienced physicians may make the diagnosis before the fifth day of fever, if other diagnostic criteria are met.⁸

One of the difficulties of using the established clinical criteria to diagnose KD is the variety of clinical presentation. Some authors have suggested that atypical or incomplete KD may comprise between 10% and 45% of cases.^{9,10} Many of these incomplete cases are recognized only by the detection of coronary artery abnormalities. The differential diagnosis of KD includes scarlet fever, staphylococcal scalded skin syndrome, Stevens-Johnson syndrome and other drug reactions, Rocky Mountain spotted fever, toxic shock syndrome, leptospirosis, rheumatoid arthritis, measles and other viral exanthems.^{7,8}

Our patient presented with clinical and laboratory findings consistent with streptococcal infection. He also met the criteria for KD, but this diagnosis was not made until the second week of illness, due to the confounding findings of streptococcal infection. This case illustrates the need for a high index of suspicion in a child with febrile illness with mucocutaneous and extremity changes, to diagnose the disease in time and institute appropriate therapy.

The importance of making an accurate and timely diagnosis of Kawasaki disease is the need for and ability to prevent serious complications. The most common cause of short- and long-term morbidity and mortality associated with KD is coronary artery abnormalities.¹¹ Untreated children develop cardiovascular abnormalities at the rate of approximately 20%, with a recent study suggesting that the rate is as high as 80% in older children.¹² Coronary artery dilatation is seen an average of ten days after the onset of the disease with aneurysm formation occurring within four weeks of the start of clinical symptoms. High dosage intravenous gamma-globulin infusions given within the

first ten days of the illness, in combination with high-dose aspirin therapy reduces the incidence of coronary artery disease by more than 80%.¹ Though gamma-globulin therapy was begun after at least 12 days of the onset of the fever, and our patient had coronary changes on his initial echocardiogram with the subsequent development of a tubular aneurysm of the anterior descending branch of his left coronary artery, significant resolution of these changes had occurred one year later. Close follow-up of these patients by a pediatric cardiologist is needed for appropriate counseling and therapy.¹³

The most recent guidelines for long-term management of patients with KD (1998) are available from the AHA's website at <http://www.americanheart.org>. Patient education materials about KD are also available at this site and also at <http://www.familydoctor.org/handouts/440.html>.

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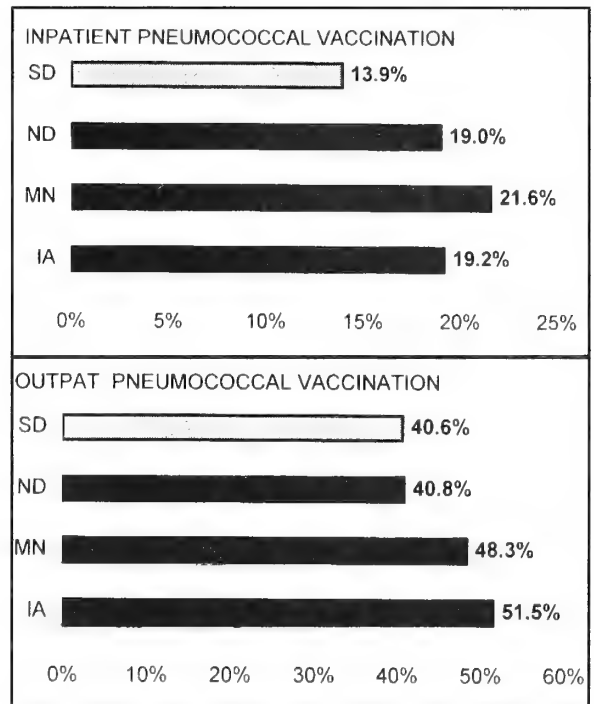
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Pneumococcal vaccine has been available since the early 1980s. Current vaccines contain antigens that represent 85% - 95% of the serotypes that cause pneumococcal disease yet the vaccine is widely underutilized. Why is this happening? Data from 1997 reveals that only 33% of diabetic patients received the vaccine. Results of a recent survey of 7,000 Medicare beneficiaries indicated that the most common reason for not getting a pneumococcal vaccine is that they did not know they needed one. The second most common reason was that their doctor did not recommend that they get a "pneumonia shot".

Pneumococcal vaccination is associated with at 43% reduction in the number of hospitalizations for pneumonia and a 29% risk of death from all causes. Estimated cost savings to health care ranged from \$113 to \$512 per person vaccinated. In spite of all the evidence in support of vaccinating against *S. pneumoniae*, why then are the vaccination rates so consistently low? One frequently expressed concern is that revaccination may be dangerous. In fact, serious adverse events associated with revaccination are rare. Medicare patients have demonstrated no increase in the rates of hospitalization 30 days after revaccination over patients vaccinated for the first time. Reactions, if they occur at all, are most likely to be localized at the injection site. Another frequently expressed concern is that hospitalized patients are too ill to be vaccinated. In a recent study of Medicare beneficiaries hospitalized with pneumonia, opportunities to provide vaccination were missed in 80% of cases. Vaccination is not recommended for patients with severely compromised cardiac or pulmonary status; however, many hospital based standing orders programs to immunize patients



prior to discharge have been safely and effectively implemented. Programs to vaccinate elderly persons presenting to the emergency department have also been successfully implemented. There has been no evidence of significant risk from the vaccination of hospitalized patients demonstrated in any of these studies. The ACIP has recently endorsed recommendations for standing orders programs in both inpatient and outpatient settings.

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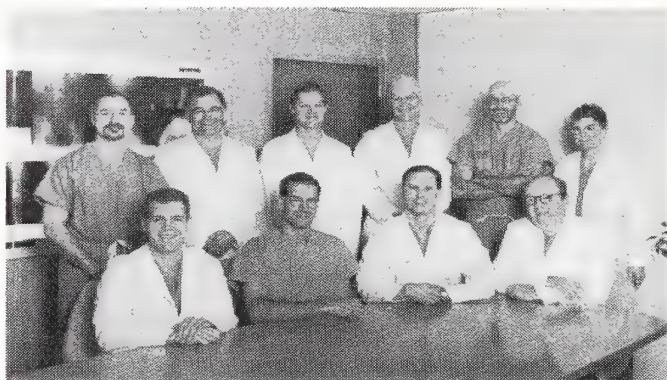
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CME Conferences

CME Conferences being held on a regular basis at various health care facilities throughout the state of South Dakota. (1 hour AMA Category 1 credit, unless otherwise specified.)

CME CONFERENCES

Upcoming Meeting **Morbidity/Mortality Conference** - 8:00 am, Fort Meade VA; date to be announced;
Info: Sharon Sulzbach, 347-7145.

DECEMBER 2000

- Dec 15 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Office 341-8061.
- Dec 15 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Dec 15 **Sports Medicine Grand Rounds - Sponsored by Avera McKennan and the Sports Medicine Center at the Orthopedic Institute** - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand 339-6832.
- Dec 16 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Dec 19 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Dec 19 **Endorama (Endocrinology Conference)** - 7:30 AM; Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.
- Dec 19 **Tumor Conference** - 7:00 AM; Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.
- Dec 20 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Dec 20 **CPC Wednesday Noon Conference** - 12:00 PM; 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.
- Dec 20 **Internal Medicine Grand Rounds** - 7:30 AM; Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.
- Dec 21 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Dec 21 **Grand Rounds** - 6:30 PM; Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.
- Dec 21 **Neuroscience Grand Rounds** - 8:00 AM; Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas 333-3114.
- Dec 21 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Dec 22 **Tumor Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Dec 23 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Dec 25 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Dec 26 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Dec 27 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Dec 28 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Dec 28 **Cardiovascular Conference** - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Dec 28 **Trauma Grand Rounds** - 12:00 PM; Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.
- Dec 28 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Info: Larry Wellman - 333-7178.
- Dec 28 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry 341-8705.
- Dec 30 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

JANUARY 2001

- Jan 2 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jan 3 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jan 3 **CPCWednesday Noon Conference** - 12:00 PM; 4th Floor, Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing,MD 331-3490.
- Jan 3 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Jan 3 **Internal Medicine, Tumor Conference** - 8:00 AM; Avera Sacred Heart Hospital Conference Room, Yankton; Speaker: to be announced; Topic: to be announced; Info: Julie Baumberger - 665-9044.
- Jan 3 **Spine Grand Rounds - Sponsored by Avera McKennan and the Spine Center at the Orthopedic Institute** - - 12:00 PM; Avera McKennan Auditorium; Info: Mary Sand, 339-6832.
- Jan 4 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jan 4 **Grand Rounds** - - 12:00 PM; Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.
- Jan 4 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Jan 5 **Morbidity/Mortality Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jan 5 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Jan 5 **Psychiatry Grand Rounds** - 12:00 PM; Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.
- Jan 6 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jan 8 **Tumor Board** - 8:00 AM; Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.
- Jan 8 **Clinical Pathology Conference** - 8:00 AM; Avera Sacred Heart Hospital, Conference Room, Yankton, Speaker: to be announced; Topic: to be announced; Info: Cheryl Duimstra - 665-9005.
- Jan 9 **CPR Certification/Recertification** - 7:00 PM; Brookings Hospital, Conference Rooms A & B, Brookview Manor; Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jan 9 **Geriatric Forum** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office 341-8108.
- Jan 9 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.
- Jan 9 **Breast Cancer Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital BHI - 333-5244.
- Jan 10 **Physician Grand Rounds** - 12:00 PM; Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.
- Jan 10 **Internal Medicine Grand Rounds** - 7:30 AM; McKennan Hospital Auditorium; Kris Rahm - 357-1366.
- Jan 10 **Geriatric Grand Rounds** - 12:00 PM; Sioux Valley Hospital Meeting Room A; Info: Gwen Jensen RN - 333-1000.
- Jan 10 **Dermatopathology Conference** - 7:30 AM; SVH Pathology Conference Room 1513; Info: 333-1730.
- Jan 11 **Tumor Conference, Avera Cancer Institute** - 12:00 PM; Avera McKennan Campus; Info: Norma Wise, 322-3030.
- Jan 11 **Pediatric Grand Rounds** - 8:00 AM; Sioux Valley Hospital Auditorium; Info: Dr. Larry Wellman - 333-7178.
- Jan 11 **Cancer Conference** - 12:00 PM; Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.
- Jan 12 **Pathology Conference** - 12:30 PM; Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.
- Jan 12 **Physicians Continuing Education** - 7:30 AM; Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.
- Jan 13 **Grand Rounds** - 8:00 AM; Yankton Medical Clinic Info: Joanna Mueller - 665-7841.
- Jan 16 **Tumor Conference** - 12:00 PM; Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

Jan 16 **Endorama (Endocrinology Conference) - 7:30 AM;** Sioux Valley Hospital Phy Center, Conference Room II; Info: Kris Rahm - 357-1366.

Jan 16 **Tumor Conference - 7:00 AM;** Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

Jan 17 **Sports Medicine Grand Rounds - Sponsored by Avera McKennan and the Sports Medicine Center at the Orthopedic Institute - - 12:00 PM;** Avera McKennan Auditorium; Info: Mary Sand 339-6832.

Jan 17 **Physician Grand Rounds - 12:00 PM;** Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

Jan 17 **CPC Wednesday Noon Conference - 12:00 PM;** 4th Floor Conference Rooms, Speaker: to be announced; Topic: to be announced; Info: David Rossing MD, 331-3490.

Jan 17 **Internal Medicine Grand Rounds - 7:30 AM;** Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.

Jan 18 **Tumor Conference, Avera Cancer Institute - 12:00 PM;** Avera McKennan Campus; Info: Norma Wise, 322-3030.

Jan 18 **Grand Rounds - 6:30 PM;** Huron Towers Auditorium; Speaker: to be announced; Topic: to be announced; Info: Gregory Wiedel MD, 353-6219.

Jan 18 **Neuroscience Grand Rounds - 8:00 AM;** Meeting Room A, Sioux Valley Hospital; Info: Denise Boraas - 333-3114.

Jan 18 **Cancer Conference - 12:00 PM;** Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

Jan 19 **Physicians Continuing Education - 7:30 AM;** Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.

Jan 19 **Psychiatry Grand Rounds - 12:00 PM;** Health Science Center, Room 106, Sioux Falls; Info: Kate Naylor - 357-1585.

Jan 20 **Grand Rounds - 8:00 AM;** Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Jan 22 **Tumor Board - 8:00 AM;** Fort Meade & Hot Springs Info: Sharon Sulzbach, 347-7145.

Jan 23 **Tumor Conference - 12:00 PM;** Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

Jan 23 **Tumor Conference - 7:00 AM;** Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

Jan 24 **Physician Grand Rounds - 12:00 PM;** Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

Jan 24 **Internal Medicine Grand Rounds - 7:30 AM;** Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.

Jan 25 **Tumor Conference, Avera Cancer Institute - 12:00 PM;** Avera McKennan Campus; Info: Norma Wise, 322-3030.

Jan 25 **Cardiovascular Conference - 12:00 PM;** Education Wellness Center, Avera St Lukes Hospital; Speaker: to be announced; Topic: to be announced; Info: Monica Eske RN, 622-5162.

Jan 25 **Trauma Grand Rounds - 12:00 PM;** Meeting Room A, Sioux Valley Hospital; Tom Berg - 333-7388.

Jan 25 **Pediatric Grand Rounds - 8:00 AM;** Sioux Valley Info: Larry Wellman - 333-7178.

Jan 25 **Cancer Conference - 12:00 PM;** Rapid City Regional Hospital-West Auditorium Info: Cancer Registry - 341-8705.

Jan 26 **Tumor Conference - 12:30 PM;** Brookings Info: Trish Gackstetter, 696-9000, Ext. 7232.

Jan 26 **Physicians Continuing Education - 7:30 AM;** Rapid City Regional Hospital-West Auditorium Info: Med Staff Office - 341-8061.

Jan 27 **Grand Rounds - 8:00 AM;** Yankton Medical Clinic Info: Joanna Mueller - 665-7841.

Jan 30 **Tumor Conference - 12:00 PM;** Meeting Rooms A or B, Sioux Valley Hospital Info: 333-7281.

Jan 30 **Tumor Conference - 7:00 AM;** Prairie Lakes Hospital, West Conference Room ; Info: Diane Martian, 882-6841.

Jan 31 **Physician Grand Rounds - 12:00 PM;** Fort Meade & Hot Springs, SD; Topic: to be announced; Info: Candy Benne, 347-7153.

Jan 31 **Internal Medicine Grand Rounds - 7:30 AM;** Sioux Valley Hospital Auditorium; Kris Rahm - 357-1366.

MISCELLANEOUS

DECEMBER 2000

- Dec 15-17 **The 33rd Annual New York Cardiovascular Symposium**, New York, NY. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Dec 15-17 **The 17th Advances in Heart Disease**, San Francisco, CA. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.

JANUARY 2001

- Jan 15-19 **The 32nd Annual Cardiovascular Conference at Snowmass**, Snowmass, CO. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 18-20 **Problem Solving in Interventional Cardiology**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 19-21 **The 15th Annual Clinical Nuclear Cardiology: Case Review with the Experts**, Los Angeles, CA. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 21-26 **Survival of the Fittest: Giving Your Hospitals a Real Advantage**, Grand Wailea Resort Hotel & Spa, Maui, HA. Fee: \$1,395. 20 hrs AMA Category 1 credit. Estes Park Institute, PO Box 400, Englewood, CO 80151. Phone: 800/727-8225. Fax: 412/798-9217.
- Jan 22-24 **Advanced Echocardiography: Illustrative Case Studies and Latest Techniques**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 22-26 **Reconstructive Surgery of the Upper and Lower Extremity: A Comprehensive Review**, Westin Hapuna Beach Prince Hotel, Mauna Kea Resort, Kohala Coast, Big Island of Hawaii. Fee: \$895. 27 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Jan 25-27 **Comprehensive Review of Echo and Nuclear Imaging in Ischemic Heart Disease**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 26-28 **The 20th Annual Perspectives on New Diagnostic and Therapeutic Techniques in Clinical Cardiology**, Lake Buena Vista, FL. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 29-31 **Pediatric and Adolescent Arrhythmias, Electrophysiology and Pacing**, Heart House Learning Ctr, Bethesda, MD. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Jan 29-Feb 3 **Cardiovascular Conference at Snowbird**, Snowbird, UT. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.

FEBRUARY 2001

- Feb 4-6 **The 2nd Annual Stress Echocardiography: An Interactive Interpretation Computer-Based Workshop**, Fort Lauderdale, FL. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Feb 4-8 **2001 Annual Healthcare Information and Management Systems Society (HIMSS) Conference and Exhibition**, Ernest N. Morial Convention Ctr, New Orleans, LA. AMA Category 1 credit avail. Phone: 312/664-4467. Internet: www.himss.org.

- Feb 5-7 **The 20th Annual Cardiovascular Conference at Snowshoe**, Snowshoe, WV. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Feb 5-9 **Gastroenterology & Hepatology for the 21st Century**, Hapuna Beach Prince Hotel, Mauna Kea Resort, Kohala Coast, Big Island of Hawaii. Fee: \$575. 20 hrs AMA Category 1 credit. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.
- Feb 9-11 **19th Southern Biomedical Engineering Conference**, Sheraton Birmingham Hotel, Birmingham, AL. AMA Category 1 credit avail. Society for Biomaterials, 13355 10th Ave, N, Ste 108, Minneapolis, MN 55441. Phone: 763/545-1919. Fax: 763-545-0335. Internet: www.biomaterials.org.
- Feb 12-15 **The 14th Annual State-of-the-Art Echocardiography**, Tucson, AZ. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Feb 12-16 **The 16th Annual Cardiovascular Conference at Hawaii**, Kohala Coast, Big Island, HI. AMA Category 1 credit avail. American College of Cardiology, 9111 Old Georgetown Rd, Bethesda, MD 20814-1699. Phone: 800/253-4636, ext 694. Fax: 301/897-9745. Internet: www.acc.org.
- Feb 18-22 **Survival of the Fittest: Giving Your Hospitals a Real Advantage**, Scottsdale Princess, Scottsdale, AZ. Fee: \$1,395. 20 hrs AMA Category 1 credit. Estes Park Institute, PO Box 400, Englewood, CO 80151. Phone: 800/727-8225. Fax: 412/798-9217.
- Feb 22-24 **Clinical Child Neurology in the 21st Century**, Spearfish Canyon Resort, Spearfish, SD. AMA Category 1 credit avail. K. Alan Kelts, MD, PhD, 2929 5th St, Ste 240, Rapid City, SD 57701. Phone: 605/341-3770.
- Feb 26-Mar 3 **Mayo Clinic Contemporary Issues in Adult Clinical Urology**, Westin Hapuna Beach Prince Hotel, Mauna Kea Resort, Big Island of Hawaii. Fee: \$625. AMA Category 1 credit avail. Mayo School of CME, Mayo Clinic, 200 1st St, SW, Rochester, MN 55905. Phone: 800/323-2688. Fax: 507/284-0532. Internet: www.mayo.edu.

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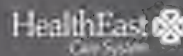


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